



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

**HARVARD COLLEGE
LIBRARY**



**TRANSFERRED
FROM THE
GRADUATE SCHOOL
OF
BUSINESS ADMINISTRATION**

SESSIONAL PAPERS

Volume XXXVII. Part IV.

First Session of Eleventh Legislature

OF THE

PROVINCE OF ONTARIO

SESSION 1905

TORONTO:

PRINTED AND PUBLISHED BY L. K. CAMERON

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1905

Can Doc 55.4.15

✓

HARVARD COLLEGE LIBRARY
RECEIVED THROUGH THE
GRADUATE SCHOOL OF
BUSINESS ADMINISTRATION

NOV 12



WARWICK BROS & RUTTER, LIMITED, PRINTERS,
TORONTO.

58-121
1-49

LIST OF SESSIONAL PAPERS.

PRESENTED TO THE HOUSE DURING SESSION.

ARRANGED ALPHABETICALLY.

TITLE.	No.	REMARKS.
Accounts, Public.....	1	<i>Printed.</i>
Agricultural College, Report.....	14	"
Agricultural and Experimental Union, Report.....	15	"
Archives, Report.....	49	"
Asylums, Report.....	38	"
Bee-Keepers' Association, Report.....	20	<i>Printed.</i>
Births, Marriages and Deaths, Report.....	9	"
Blind Institute, Report.....	41	"
Boundaries extension, correspondence.....	50	<i>Not printed.</i>
Bush, George, correspondence.....	53	"
Children, Neglected, Report.....	43	<i>Printed.</i>
Cohoe, correspondence <i>re</i> appointment.....	55	<i>Not printed.</i>
Crown Lands, Report.....	3	<i>Printed.</i>
Dairymen's Association, Report.....	22	<i>Printed.</i>
Deaf and Dumb Institute, Report.....	42	"
Division Courts, Report.....	33	"
Education, Report.....	12	<i>Printed.</i>
Education Department, Orders-in-Council.....	57	<i>Printed for Distribution only.</i>
Elections, Return from Records of General.....	46	<i>Printed.</i>
Entomological Society, Report.....	19	"
Estimates, 1905.....	2	"
Factories, Report.....	8	<i>Printed.</i>
Fairs and Exhibitions, Report.....	26	"
Farmers' Institutes, Report.....	25	"
Fisheries, Report.....	31	"
Forestry, Report.....	4	"
Fruit Experiment Stations, Report.....	17	"
Fruit Growers' Association, Report.....	16	"
Fumigation Appliances, Report.....	18	"
Game Commission, Report.....	30	<i>Printed.</i>
Gaols, Prisons, Report.....	39	"
Good Roads, Report.....	27	"
Health, Report.....	36	<i>Printed.</i>
Highways, Report.....	27	"
Hospitals and Charities, Report.....	40	"

TITLE.	No.	REMARKS.
Indian Claims, North West Angle Treaty No. 3.	61	<i>Printed.</i>
Industries, Report.....	28	"
Insurance, Report.....	10	"
James Bay Railway route, correspondence.....	58	<i>Not printed.</i>
Judicature Act, Orders-in-Council.....	51.	"
Labour, Report.....	29	<i>Printed.</i>
Legal Offices, Report.....	34	"
Librarian, Report.....	47	<i>Not printed.</i>
Liquor Licenses, Report of inspection.....	44	<i>Printed.</i>
Liquor Licenses Act, enforcement in N. Hastings.....	52	<i>Not printed.</i>
Liquor License Commissioners, appointment of, in E. Lambton	60	"
Live Stock Associations, Report	23	<i>Printed.</i>
Live Stock Registrar, Report.....	24	"
Loan Corporations, Report	11	"
Lunatic Asylums, Report.....	38	"
Mines, Report.....	5	<i>Printed.</i>
Mining Divisions, revised Regulations.....	56	<i>Printed.</i>
North West Angle Treaty No. 3, Indian Claims.....	61	<i>Printed for Distribution only.</i>
Prisons and Reformatories, Report.....	39	<i>Printed.</i>
Provincial Municipal Auditor, Report	45	"
Public Accounts, 1904	1	"
Public Works, Report.....	7	"
Queen Victoria Niagara Falls Park, Report.....	6	<i>Printed.</i>
Railway Legislation in U. States, Report.....	54	<i>Printed.</i>
Registrar-General, Report.....	9	"
Registry Offices, Report.....	35	"
River aux Raisin, drainage, correspondence.....	62	<i>Not printed.</i>
Road Making, Report.....	27	<i>Printed.</i>
School Practical Science, calendar.....	21	<i>Printed for Distribution only.</i>
Secretary and Registrar, Report.....	37	<i>Printed.</i>
Statute Distribution, Statement of.....	59	<i>Not printed.</i>
Temiskaming and Northern Ontario Railway, Report..	48	<i>Printed.</i>
Toronto University, Report.....	13	"
Toronto University, Report of Commission.....	32	"

LIST OF SESSIONAL PAPERS.

Arranged in Numerical Order with their Titles at full length ; the dates when Orderedd and when presented to the Legislature ; the name of the Member who moved the same, and whether Ordered to be Printed or not.

CONTENTS OF PART I.

- No. 1. Public Accounts of the Province for the year 1904. Presented to the Legislature, March 31st, 1905. *Printed.*
- No. 2. Estimates for the service of the Province until the Estimates of the year are finally passed. Presented to the Legislature, 23rd March, 1905. *Not Printed.* Estimates for the year 1905. Presented to the Legislature, 7th April, 1905. *Printed.* Estimates (Supplementary) for the year 1905. Presented to the Legislature, 18th May, 1905. *Printed.*
- No. 3. Report of the Commissioner of Crown Lands for the year 1904. Presented to the Legislature, 17th May, 1905. *Printed.*
- No. 4. Report of the Clerk of Forestry for the year 1904. Presented to the Legislature, 17th May, 1905. *Printed.*

CONTENTS OF PART II.

- No. 5. Report of the Bureau of Mines for the year 1904. Presented to the Legislature, 6th April, 1905. *Printed.*
- No. 6. Report of the Commissioners of the Queen Victoria Niagara Falls Park, for the year 1904. Presented to the Legislature, 31st March, 1905. *Printed.*
- No. 7. Report of the Commissioner of Public Works for the year 1904. Presented to the Legislature, 31st March, 1905. *Printed.*
- No. 8. Report of the Inspectors of Factories for the year 1904. Presented to the Legislature, 15th May, 1905. *Printed.*
- No. 9. Report relating to the registration of Births, Marriages and Deaths for the year 1903. Presented to the Legislature, 31st March 1905. *Printed.*

CONTENTS OF PART III.

- No. 10. Report of the Inspector of Insurance for the year 1904. Presented to the Legislature, 7th April, 1905. *Printed.*

CONTENTS OF PART IV.

- No. 11. Loan Corporations, Statements by Building Societies, Loan and other Companies, for the year 1904. Presented to the Legislature, 3rd May, 1905. *Printed.*
- No. 12. Report of the Minister of Education, for the year 1904 with the Statistics of 1903. Presented to the Legislature, 17th May, 1905. *Printed.*
- No. 13. Auditors' Report to the Board of Trustees, University of Toronto, on Capital and Income Accounts, for the year ending 30th June, 1904. Presented to the Legislature, 17th May, 1905. *Printed.*
- No. 14. Report of the Ontario Agricultural College and Experimental Farm, for the year 1904. Presented to the Legislature, 17th May, 1905. *Printed.*

CONTENTS OF PART V.

- No. 15. Report of the Ontario Agricultural and Experimental Union of the Province, for the year 1904. Presented to the Legislature, 3rd April, 1905. *Printed.*
- No. 16. Report of the Fruit Growers' Association of the Province, for the year 1904. Presented to the Legislature, 12th April, 1905. *Printed.*
- No. 17. Report of the Fruit Experiment Stations of the Province, for the year 1904. Presented to the Legislature, 10th May, 1905. *Printed.*
- No. 18. Report of the Inspector of Fumigation Appliances of the Province, for the year 1904. Presented to the Legislature, 15th May, 1905. *Printed.*
- No. 19. Report of the Entomological Society, for the year 1904. Presented to the Legislature, 3rd April, 1905. *Printed.*

CONTENTS OF PART VI.

- No. 20. Report of the Bee-Keepers' Association of the Province, for the year 1904. Presented to the Legislature, 12th April, 1905. *Printed.*
- No. 21. Calendar of the Ontario School of Practical Science, affiliated with the University of Toronto. Presented to the Legislature, 3rd May, 1905. *Printed for distribution only.*
- No. 22. Reports of the Dairymen's Associations of the Province, for the year 1904. Presented to the Legislature, 11th April, 1905. *Printed.*
- No. 23. Reports of the Live Stock Associations of the Province, for the year 1904. Presented to the Legislature, 15th May, 1905. *Printed.*
- No. 24. Report of the Registrar of Live Stock of the Province, for the year 1904. Presented to the Legislature, 15th May, 1905. *Printed.*

CONTENTS OF PART VII.

- No. 25. Report of the Farmers' Institutes of the Province, for the year 1904. Presented to the Legislature, 14th April, 1905. *Printed.*

- No. 26. Report of Ontario Fairs and Exhibitions of the Province, for the year 1904. Presented to the Legislature, 3rd May, 1905. *Printed.*
- No. 27. Report of the Commissioner of Highways, for the year 1904. Presented to the Legislature, 12th April, 1905. *Printed.*
- No. 28. Report of the Bureau of Industries of the Province, for the year 1904. Presented to the Legislature, 15th May, 1905. *Printed.*

CONTENTS OF PART VIII.

- No. 29. Report of the Bureau of Labour, for the year 1904. Presented to the Legislature, 17th May, 1905. *Printed.*
- No. 30. Report of the Ontario Game Commission, for the year 1904. Presented to the Legislature, 9th May, 1905. *Printed.*
- No. 31. Report of the Department of Fisheries, for the year 1903. Presented to the Legislature, 3rd April, 1905.
- No. 32. Report of Commission appointed to enquire into and report upon the matters referred to in a Resolution of the Senate of the University of Toronto, passed on the 20th January, 1905. Presented to the Legislature, 23rd May, 1905. *Printed.*
- No. 33. Report of the Inspector of Division Courts, for the year 1904. Presented to the Legislature, 3rd May, 1905. *Printed.*
- No. 34. Report of the Inspector of Legal Offices, for the year 1904. Presented to the Legislature, 3rd April, 1905. *Printed.*
- No. 35. Report of the Inspector of Registry Offices, for the year 1904. Presented to the Legislature, 18th May, 1905. *Printed.*

CONTENTS OF PART IX.

- No. 36. Report of the Provincial Board of Health, for the year 1904. Presented to the Legislature, 31st March, 1905. *Printed.*
- No. 37. Report of the Secretary and Registrar of the Province, for the year 1904. Presented to the Legislature, 18th May, 1905. *Printed.*
- No. 38. Report upon the Lunatic and Idiot Asylums of the Province, for the year ending 30th September, 1904. Presented to the Legislature, 17th May, 1905. *Printed.*
- No. 39. Report upon the Prisons and Reformatories of the Province, for the year ending 30th September, 1904. Presented to the Legislature, 17th May, 1905. *Printed.*
- No. 40. Report upon the Hospitals and Charities of the Province, for the year ending 30th September, 1904. Presented to the Legislature, 17th May, 1905. *Printed.*

CONTENTS OF PART X.

- No. 41. Report upon the Institution for the Education of the Blind, Brantford, for the year ending 30th September, 1904. Presented to the Legislature, 6th April, 1905. *Printed.*

- No. 42. Report upon the Institution for the Education of the Deaf and Dumb, Belleville, for the year ending 30th September, 1904. Presented to the Legislature, 31st March, 1905. *Printed.*
- No. 43. Report of Superintendent. Neglected and Dependent Children of Ontario, for the year 1904. Presented to the Legislature, 18th May, 1905. *Printed.*
- No. 44. Report upon the Inspection of Liquor Licenses, for the year 1904. Presented to the Legislature, 17th May, 1905. *Printed.*
- No. 45. Report of the Provincial Municipal Auditor for the year 1904. Presented to the Legislature, 15th May, 1905. *Printed.*
- No. 46. Return from the Records of the General and Subsequent Elections to the Legislative Assembly on 25th January, and 21st February, 1905, shewing:—(1) The number of Votes polled for each Candidate in each Electoral District in which there was a contest. (2) The majority whereby each successful Candidate was returned. (3) The total number of votes polled in each District (4) The number of Votes remaining Unpolled. (5) The number of names on the Voters' Lists in each District. (6) The population of each District as shewn by the last Dominion Census. (7) Similar Statements as to any Elections held since the General Election. (8) A General Summary of Votes cast in each Electoral District. Presented to the Legislature, 22nd March, 1905. *Printed.*
- No. 47. Report upon the state of the Library. Presented to the Legislature, 5th April, 1905. *Not printed*
- No. 48. Report of the Temiskaming and Northern Ontario Railway Commission, for the year 1904. Presented to the Legislature, 10th May, 1905. *Printed.*

CONTENTS OF PART XI.

- No. 49. Report of the Archivist, Ontario, for the year 1904. Presented to the Legislature, 17th May, 1905. *Printed.*

CONTENTS OF PART XII.

- No. 50. Copies of correspondence *in re* the extension of the Boundaries of the Province. Presented to the Legislature, 27th March, 1905. *Not Printed.*
- No. 51. Copies of Orders-in-Council in accordance with the provisions of section 187 of the Judicature Act, relating to commutation of fees of Public Officers. Presented to the Legislature, 31st March, 1905. *Not printed.*
- No. 52. Return to an Order of the House of the twenty-second day of April, 1904, for a Return giving names of all persons convicted for

violation of the Liquor License Act in the District of North Hastings in the years 1902 and 1903, together with the amounts of fines and costs in each case and the dates when the same were paid. Presented to the Legislature, 31st March, 1905. *Mr. Pearce. Not printed.*

- No. 53. Return to an Order of the House of the thirty-first day of March, 1905, for a Return of copies of all correspondence between the late Government of the Province, or any member or official thereof, and the Sheriff of the County of Lincoln with regard to the appointment of George Bush as Gaoler for the County of Lincoln. Presented to the Legislature, 3rd April, 1905. *Mr. Jessop. Not printed.*
- No. 54. Report of the Commissioners appointed to enquire into and report the various phases of Railway Legislation in force in the United States, affecting taxation of Railways. Presented to the Legislature, 7th April, 1905. *Printed.*
- No. 55. Return to an Order of the House of the sixth day of April, 1905, for a Return of copies of all correspondence between the late Government, or any member or official thereof, and G. P. Wilson and Col. Cohoe, respecting the appointment of Col. Cohoe to the position of High Court Registrar. Presented to the Legislature, 7th April, 1905. *Mr. Fraser. Not printed.*
- No. 56. Revised and amended Regulations for Mining Divisions relating to the Michipicoten and Temiskaming Mining Divisions. Presented to the Legislature, 20th April, 1905. *Printed for distribution only.*
- No. 57. Copies of Orders-in-Council relating to the Education Department. Presented to the Legislature, 20th April, 1905. *Printed for distribution only.*
- No. 58. Return to an Order of the House of the twelfth day of April, 1905, for a Return of copies of all correspondence, papers, documents, profiles and maps, between the Government or any Department thereof and the James Bay Railway Company, or any other person or persons, relating to the route of the James Bay Railway, from January 1st, 1904, down to April 1st, 1905, both days inclusive. Presented to the Legislature, 9th May, 1905. *Mr. Hoyle. Not printed.*
- No. 59. Statement of distribution of Revised and Sessional Statutes, 1898 to 1904. Presented to the Legislature, 3rd May, 1905. *Not printed.*
- No. 60. Return to an Order of the House of the 3rd day of May, 1905, for a Return of the copies of all correspondence, petitions or other papers in connection with the appointment of License Commissioners for the East Riding of Lambton. Presented to the Legislature, 9th May, 1905. *Mr. Auld. Not printed.*
- No. 61. Return to an Address to His Honour, the Lieutenant-Governor of the fifth day of May, 1905, praying that he will cause to be laid before

this House, a Return of copies of the Statement of the Case of the Dominion, and the answer of Ontario to the Statement of Case of the Dominion, filed on Indian Claims arising out of the Northwest Angle Treaty, No. 3. Presented to the Legislature, 9th May, 1905. *Mr. Smellie. Printed.*

- No. 62. Return to an Order of the House of the fifteenth day of May, 1905, for a Return of copies of all correspondence, papers, documents and memoranda relating to the drainage of the River aux Raisin, in the Townships of Osnabruck, Cornwall and Roxborough, in the County of Stormont, between the Commissioner of Public Works or his Deputy, in the years 1901, 1902, 1903 and 1904, and a Mr. Bell, C.E., Mr. Laird, C.E., Mr. Rankin, Provincial Drainage Referee, and the Councils of the Townships of Roxdorough, Cornwall and Osnabruck; also, copies of all correspondence between the Hon. G. W. Ross and any of the above parties; also copies of any letters regarding this matter received by the Government from Mr. J. W. McCart and Messrs. McLennan, Cline and McLennan; also, copies of letters, authorizing the payment of Mr. Bell, C.E., Mr. Laird, C.F., and several men working with them; also, a Return of the amount paid to each of the above during the years 1901, 1903, 1904. Presented to the Legislature, 23rd May, 1905. *Mr. Kerr. Not printed.*

Loan Corporations Statements

BEING

FINANCIAL STATEMENTS MADE BY

BUILDING SOCIETIES, LOAN COMPANIES, LOANING LAND COMPANIES, AND TRUSTS
COMPANIES

FOR THE YEAR ENDING

31st DECEMBER 1904.

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:

Printed and Published by L. K. CAMERON, Printer to the King's Most Excellent Majesty.
1905.



WARWICK BROS & RUTTER, LIMITED, PRINTERS
TORONTO

*To His Honour WILLIAM MORTIMER CLARK, K. C.,
Lieutenant-Governor of Ontario.*

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present to your Honour the Report of the Registrar of Loan Corporations for the Province of Ontario for the year ended 31st December, 1904.

Respectfully submitted,

J. P. WHITNEY,
Attorney-General.

Toronto, 1st May, 1905.

TO THE HONOURABLE J. P. WHITNEY, LL.D., K.C., M.P.P., ETC.,

Attorney-General,

Toronto.

SIR,—I have the honour to present herewith the eighth Report of the Annual Statements made by Loan Corporations under the Act (R. S. O. 1897, c. 205). Prefixed to these statements will be found a copy of the official blank form.

The Companies included in the Report are classified (as in the Act) into:

Loan Companies. .

Loaning Land Companies.

Trusts Companies.

The Loan Companies forming the first mentioned Class, are further subdivided into:

A. Companies having only permanent stock.

B. Companies having withdrawable as well as permanent stock, or having withdrawable stock only.

I have the honour to be, Sir,

Your obedient servant,

J. HOWARD HUNTER,

Registrar of Loan Corporations.

PARLIAMENT BUILDINGS,
Toronto, 28th April, 1905.

CONTENTS

Detailed Reports

Loan Companies :—

I. Loan Companies having only Permanent Stock.....	17 <i>et seq</i>
II. Loan Companies having Withdrawable Stock as well as Permanent Stock or having Withdrawable Stock only.....	159 <i>et seq</i>
Loaning Land Companies.....	223 <i>et seq</i>
Truss Companies	247 <i>et seq</i>
Comparative Tables showing Liabilities, Assets, etc.....	261 <i>et seq</i>
Index to Loan Corporations.....	286 <i>et seq</i>

Appendix :

I. Recent Proceedings under the Penal Clauses of The Loan Corporations Act, R. S. O., 1897, c. 205, s. 117.—“Diamond Leases.”	293 <i>et seq</i>
II. “Credit Companies.”.....	304 <i>et seq</i>
III. “Bond-Investment” Schemes.....	306 <i>et seq</i>
IV. “Home-Building” Schemes	319 <i>et seq</i>

FORM OF ANNUAL STATEMENTS

SUPPLIED TO LOAN CORPORATIONS FOR PURPOSES OF THIS REPORT.

Note.—By comparing with this form the statement actually made by each company and printed within, the fulness and completeness of the company's statement may be tested.

FORM OF ANNUAL STATEMENT.

The following is a copy of the form supplied to each Loan Corporation for purposes of its Annual Statement for the year ending 31st December, 1904.

The Annual Statement and Duplicate (each duly completed, with its schedule) are to be filed with the Registrar of Loan Corporations for Ontario, (Department of Insurance, Parliament Buildings), Toronto, on or before the *first day of March, 1905*, subject to a penalty of \$50 for each day of default in filing, as provided by "The Loan Corporations Act," Section 99. In each of the statements there should be enclosed a certified copy of any statement or statements made by the Directors to the Shareholders during the year 1904, including a copy of the Auditors' Certificate. Ibid., Secs. 93, 100.

The above duplicates should be accompanied by a cheque for \$5 (filing fee) drawn payable to the Provincial Treasurer of Ontario.

ANNUAL STATEMENT

Of the condition and affairs of the (Name of Corporation) of at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The Corporation was incorporated under the laws of on the day of 18.....

The Head Office of the Corporation is at No. (Name of Street) in the (City, Town or Village) of in the (Province, State, etc.) of

The Chief Agency for Ontario (If the Corporation's Head Office is elsewhere than in Ontario) is situated at No. (Name of Street) Street in the (City, Town, etc.) of in the Province of Ontario.

The Chief Agent and Attorney for Ontario (If the Corporation's Head office is elsewhere than in Ontario) is (Name) and his address is in the Province of Ontario.

The Board is constituted of Directors, holding office for the term of years.

The Directors and Chief Executive Officers of the Corporation at the 31st December, 1904, were as follows:

NAMES OF DIRECTORS AND CHIEF EXECUTIVE OFFICERS.	DESIGNATION OF OFFICE.	ADDRESS.	CURRENT TERM OF OFFICE.	
			Began. (Date.)	Will end. (Date.)
	President.			
	Vice-President.			
	Directors.			
	Manager.			
	Secretary.			

A. Permanent Capital Stock: Total amount authorized, \$ Total amount subscribed, \$ as more particularly set out in Schedule A hereto. (Page 7 of this Form.)

B. Terminating or Withdrawable Stock.

SUBSCRIBED SHARES OF TERMINATING OR WITHDRAWABLE STOCK.	FULLY PAID.		PREPAID.		INSTALMENT.		Total.
	No.	Amount.	No.	Amount.	No.	Amount.	
		\$		\$		\$	
Number and amount in force at 31st December, 1903.....							
" " " " issued during 1904.....							
Gross total in force at any time in 1904.....							
	No. of shares.	Amount.					
Deduct as follows:							
Withdrawn and paid off during 1904.....							
Retired by Corporation during 1904.....							
Converted into Permanent Stock during 1904.....							
Forfeited and lapsed during 1904.....							
Total deductions.....							
Net total remaining in force at 31st December, 1904.....							

Summary of Terminating or Withdrawable Stock in force 31st December, 1904.

Total as above.	No. of Shareholders.	Of which there has been credited to loan fund.
Shares Fully Paid Stock..... at \$	per Share.....\$	on which shareholders have paid in \$
Shares "Prepaid" Stock (other than above)..... at \$	per Share.....\$	on which " " paid \$
Shares Instalment Stock (payable by fixed periodical payments at \$	per Share.....\$	on which " " paid \$

Totals

Total amount distributed or credited to Terminating or Withdrawable Stock in 1904.

- (1) As Interest.....\$
 - Rate of such interest, per cent. per annum.....\$
- (2) As dividends out of profits.....\$
 - Rate or rates per cent. of such dividends.....\$

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

DR.

CAPITAL AND LIABILITIES.

CAPITAL (LIABILITIES TO STOCKHOLDERS OR SHAREHOLDERS.)		\$	cts.	\$	cts.
Item No.	*A. Permanent Capital Stock or Shares.				
1. (a)	Ordinary Joint Stock Capital fully called : Total called \$ Total paid thereon				
2. (b)	Ordinary Joint Stock Capital % called : Total called \$ Total paid thereon				
3. (c)	Ordinary Joint Stock Capital % called : Total called \$ Total paid thereon				
4. (cc)	Joint Stock Capital paid in advance of calls†				
5. (d)	Dividends declared in respect of (1), (2) or (3), but not yet paid				
6. (e)	Unappropriated profits in respect of (1), (2) or (3)				
7. (f)	Reserve Fund in respect of (1), (2) or (3)				
8. (g)	Contingent Fund in respect of (1), (2) or (3)				
9. (h)	Instalment Permanent Stock (payable by fixed periodical payments) : Total subscribed \$ on which has been paid				
10. (i)	Dividends declared on (8) but not yet paid				
11. (j)	Unappropriated profits on (8)				
12. (k)	Reserve Fund in respect of (8)				
13. (l)	Contingent Fund in respect of (8)				
14. (m)	Instalments or premiums on (8) paid in advance†				
NOTE.—Liabilities reported in 1903 under A, but written off in 1904 (not extended) \$					
B. Terminating Capital Stock or Shares.					
14. (a)	Fully paid stock, less shown in (24) : Total in force shares at \$... per share carried to Loan Fund				
15. (b)	Profits or accrued interest on (14), less shown in (25) and credited or appropriated but not yet paid				
16. (c)	Profits or accrued interest on (14), less shown in (25) and not credited or appropriated				
17. (d)	Prepaid Stock, less shown in (24) : Total in force shares at \$... per share on which has been paid into Loan Fund				
18. (e)	Profits or accrued interest on (17), less shown in (25) and credited or appropriated but not yet paid				
19. (f)	Profits or accrued interest on (17), less shown in (25) and not credited or appropriated				
20. (g)	Instalment Stock, less shown in (24) : Total issue now in force shares at \$... per share on which has been paid in all \$..... of which sum there has been paid into the Loan Fund				
21. (h)	Profits or accrued interest on (20), less shown in (25) and credited or appropriated but not yet paid				
22. (i)	Profits or accrued interest on (20), less shown in (25) and not credited or appropriated				
23. (j)	Instalments or premiums paid on (20) in advance†				
NOTE.—Liabilities reported in 1903 under B, but written off in 1904 (not extended) \$					
24. 25.	Liability in respect of Terminating Stock or Shares (Fully-paid, Prepaid or Instalment), other than shown in (14), (17) and (20), as to which the Corporation has received notice of withdrawal, but at 31st Dec., 1904, had not paid off viz. :—				
24.	Principal sum due by Corporation				
25.	Interest, Profits or Dividends due by Corporation				
C. Liability to Stockholders or Shareholders other than as shown under A or B, viz. :—					
26.	.....			
LIABILITIES TO THE PUBLIC.					
27.	Deposits (including unclaimed deposits) Payable on Demand \$ Payable on Notice \$ Total				
28.	Interest on deposits, due or accrued, or capitalized				
29.	(a) Interest due and accrued on 3 (cc) : or on 13 (m) : or on 23 (j)				
30.	Debentures issued in Canada				
31.	Interest due and accrued on (29)				
32.	Debentures issued elsewhere than in Canada				
33.	Interest due and accrued on (31)				
34.	Debenture stock issued in Canada				
35.	Interest due and accrued on (33)				
36.	Debenture stock issued elsewhere than in Canada				
37.	Interest due and accrued on (35)				
38.	Owing to Banks (including interest due or accrued)				
39.	Due on Bills payable other than (37), including interest due or accrued				
40.	Due on Loans in process of completion or to pay assumed mortgages				
41.	Other liabilities to the public, viz. :—				
42.	(a)				
43.	(b)				
44.	(c)				
Total Actual Liabilities					

BALANCE SHEET AS AT 31st DECEMBER, 1904.—Continued.

Dr.—Continued.

CONTINGENT LIABILITIES.		\$	cts.	\$	cts.
44.	Claims against the Corporation not acknowledged as debts, viz :—				
45.	(a)				
46.	(b)				
47.	(c)				
48.	Money for which the Corporation is contingently liable, viz :—				
49.	(a) Principal guaranteed				
50.	(b) Interest guaranteed				
51.	(c) Trust Funds invested but not guaranteed :—				
52.	1. Principal				
53.	2. Interest				
54.	(d) Trust Funds uninvested not bearing interest and not guaranteed				
55.	(e) Other contingent liabilities				
	Total Contingent Liabilities				
NOTE.—Contingent liabilities reported in 1903 but written off in 1904 (not extended).					
	Gross Total Liabilities, Actual and Contingent				
* Increase or decrease of authorized Permanent Capital Stock in 1904.					
Authority for said increase or decrease					
† Under what authority, and upon what terms have such advances been received by Company? Ans.					
CR.		\$	cts.	\$	cts.
I. ASSETS OF WHICH THE CORPORATION IS THE BENEFICIAL OWNER.					
A. Immovable Property Owned Beneficially by the Corporation :—					
1.	(a) Office premises situated as follows :—				
2.	(i) At				
3.	(ii) At				
4.	(iii) At				
5.	(b) Freehold land (including buildings) other than foregoing*				
6.	(c) Leasehold land (including buildings) other than foregoing*				
7.	(d)				
8.	(e)				
B. Debts Secured by Mortgages of Land :—					
9.	(a) Debts (other than item 10) secured by mortgages of land				
10.	(b) Debts secured by mortgaged land held for sale †				
	(bb) Debts secured by land held by the Company as Mortgagee in possession, or secured by land for the rents and profits of which the Company is accountable				
11.	(c) Interest due or accrued on items 9 and 10 and not included therein †				
12.	(d) Of the debts mentioned in items 9, 10 and 11 the sum of \$				
	directors or officers of the Corporation (not extended) \$				
C. Debts not above enumerated for which the Corporation holds Securities as follows :—					
13.	(a) Debts secured by accepted Bills of Exchange				
14.	(b) Debts secured by Municipal Bonds or Debentures				
15.	(c) Debts secured by Public School Debentures				
16.	(d) Debts secured by Loan Corporations' Debentures				
17.	(e) Debts secured by Dominion Government Stock or Bonds				
18.	(f) Debts secured by Stock or Bonds of any of the Provinces of Canada				
19.	(g) Debts secured by Stock or Bonds of other Governments				
20.	(h) Debts secured only by Permanent Stock or Shares of the Corporation †				
21.	(i) Debts secured only by Terminating Stock or Shares of the Corporation				
22.	(j) Debts secured by				
23.	(k) Debts secured by				
24.	(l) Debts secured by				
25.	(m) Debts secured by				
26.	(n) Interest due or accrued on items 14 to 25 and not included therein				
D. Unsecured Debts :—					
27.	(a)				
28.	(b)				
29.	(c)				
30.	(d) Interest due or accrued on items 27 to 29 and not included therein				

BALANCE SHEET AS AT 31st DECEMBER, 1904.

CR.—Continued.

I. ASSETS OF WHICH THE CORPORATION IS THE BENEFICIAL OWNER.—Con.		\$	cts.	\$	cts.
E. Cash.					
31. (a) On hand.....					
32. (b) In bank as follows:—					
33. (I) In the.....	Bank at.....				
34. (II) In the.....	Bank at.....				
35. (III) In the.....	Bank at.....				
36. (IV) In the.....	Bank at.....				
F. Assets not hereinbefore mentioned.					
37. (a))	} Particulars given in Schedule 1, page 5b.				
38. (b))					
39. (c))					
40. (d))					
41. (e))					
42. (f))					
Total of assets owned beneficially by Corporation.....					
NOTE.—Assets reported in 1903, but written off in 1904 (not extended) \$......					
N. B.—Section I (containing assets of which the Corporation is beneficial owner) is to be balanced independently of Sections II (containing assets not so owned).					
II. ASSETS NOT OWNED BENEFICIALLY BY CORPORATION BUT FOR WHICH THE CORPORATION IS ACCOUNTABLE:—					
A. As Guarantor.					
(a) Mortgage securities:					
43. (I) Principal.....					
44. (II) Interest due and accrued					
(b) Other securities:—					
45. (I) Principal.....					
46. (II) Interest due and accrued					
B. As Trustee, Representative, Guardian, or Agent (without Guarantee.)					
(a) Mortgage securities:—					
47. (I) Principal.....					
48. (II) Interest due and accrued					
(b) Other securities:—					
49. (I) Principal.....					
50. (II) Interest due and accrued					
51. (c) Unsecured debts.....					
52. (d) Uninvested Trust funds.....					
Total of Assets II					
NOTE.—Assets reported in 1903, but written off in 1904 (not extended) \$......					
Gross total of Assets I and II.....					

* Embracing property vested in the Company by foreclosure or by conveyance or under quit-claim deed.

† Including rent of properties held under power of sale.

‡ As to limit of such loans see Loan Corp. Act, R. S. O. 1897, c. 205, s. 19 (2), as construed by 3 Edw. VII c. 16, s. 1.

CASH ACCOUNT.

RECEIPTS FOR THE YEAR ENDING 31st DECEMBER, 1904.

I.—RECEIVED BY THE CORPORATION FOR ITS OWN USE.		Amount Carried to earnings, maintenance or contingent account. (Column 1.)	Amount Carried to Capital Account.				Total. (Column 4.)
			Terminating Capital. (Column 2.)	Permanent Capital including Reserve. (Column 3.)			
Item No.		\$	c.	\$	c.	\$	c.
A.—Balances from 31st December, 1903.							
1.	(a) Capital Account.....						
2.	(b) Cash (not already shown under (1)).....						
3.	(i) On hand.....						
	(ii) In bank.....						
B.—Sums received Wholly or Partly on Capital Stock :—							
4.	(a) Calls on Joint Stock Permanent Capital.....						
	(aa) Joint Stock Capital received in advance of call.....						
5.	(b) Premiums on (4).....						
6.	(c) Sales of fully paid Building Society Stock.....						
7.	(d) Sales of prepaid Building Society Stock.....						
8.	(e) Dues on Instalment Building Society Stock.....						
9.	(f) Premiums on (6), (7) and (8).....						
C.—Receipts on Account of Investments, Loans or Debts.							
10.	(a) On Mortgages of Realty :—						
	(i) Principal.....						
11.	(ii) Interest.....						
12.	(b) On other securities :						
	(i) Principal.....						
13.	(ii) Interest or dividends.....						
14.	(c) Unsecured Debts.....						
	(i) Principal.....						
15.	(ii) Interest.....						
D.—Receipts from Real Estate Owned Beneficially by Corporation :—							
16.	(a) Sales (not included in any of the foregoing items).....						
17.	(b) Rents*.....						
E.—Miscellaneous.							
18.	(a) Commission, Brokerage (or Remuneration as Corporate Agents, Trustees, etc.).....						
19.	(b) Premium or Bonus on Loans.....						
20.	(c) Membership or Entry Fees (being income of corporation).....						
21.	(d) Fines.....						
22.	(e) Forfeiture or Lapses. (Extend into Column 1).....						
23.	(f) Revivals of Terminating Stock. (Extend into Column 2).....						
24.	(g) Conversion of Terminating Stock into Permanent Stock. (Extend into Column 3).....						
F.—Borrowed Money.							
25.	(a) Bank or other advances, discounts or overdrafts.....						
26.	(b) Borrowed by taking deposits.....						
27.	(c) Borrowed on Debentures.....						
28.	(d) Borrowed on Debenture Stock.....						
29.	(e) Borrowed otherwise, viz :—						
G.—Receipts from Other Sources, viz :							
30.	(a).....						
	(b).....						
	(c).....						
Totals.....							

RECEIPTS FOR THE YEAR ENDING 31st DECEMBER, 1904.—Continued.

N.B.—Section I. (showing cash received by the Corporation for its own use) is to be balanced independently of Section II. (showing cash received as corporate trustee, etc.)

II.—RECEIVED AS CORPORATE TRUSTEE, REPRESENTATIVE, GUARDIAN OR AGENT, IN TRUST.

A.—Balances from 31st December, 1903.

Item No.	Amount carried to earnings, main- tenance or contingent account.		Carried to Capital Account.		Total.	
	\$	c.	\$	c.	\$	c.
31. (a) Capital Account.....						
31. (b) Cash (not included in 31).....						
32. (i) On hand.....						
33. (ii) In bank.....						
B.—Received on Account of Investments, Loans or Debts :—						
34. (a) On Mortgages: Principal, \$..... Interest, \$.....						
35. (b) On other securities: Principal, \$..... Interest, \$.....						
36. (c) On Unsecured Debts: Principal, \$..... Interest, \$.....						
C.—Receipts from Real Estate.						
37. (a) Sales not included in foregoing items.....						
38. (b) Rents*						
D.—Receipts from Other Sources, viz. :—						
39. (a)						
40. (b)						
41. (c)						
Totals						

* Includes rents of property acquired by purchase or exchange, or by foreclosure, or by quit claim deed.

† Under what authority and upon what terms have such advances been received by company?

Ans.

CASH ACCOUNT.

EXPENDITURE FOR THE YEAR ENDING 31st DECEMBER, 1901.

I.—EXPENDED ON CORPORATION ACCOUNT.

A.—Sums Loaned or Invested on Capital Account:

Item No.		Amount carried to Earnings, Maintenance or Contingent Account. (Column 1.)		Amount carried to Capital Account.		Total.	
		\$	c.	\$	c.	\$	c.
1.	(a) Loaned on Mortgages of Realty (including item 7 (e) if no separate account therefor).....						
2.	(b) Loaned or invested in other Securities, viz:—						
3.	(i).....						
4.	(ii).....						
5.	(iii).....						
6.	(iv).....						
7.	(c) Real Estate purchased.....						
8.	(d) Incumbrances on Realty paid off.....						
9.	(e) Insurances or taxes advanced on property mortgaged to the Corporation.....						

B.—Expended on Stock Account:—

10.	Dividends paid on Permanent Stock. (Extend into Col. 1).—						
11.	(a) Interest paid on Joint Stock Capital received in advance of calls. (Extend into Col. 1).....						
12.	Dividends paid on Terminating Stock. (Extend into Col. 1).....						
13.	Interest paid on terminating stock. (Extend into Col. 1).....						
14.	Paid for Terminating Stock withdrawn. (Extend into Col. 1 or 2, or divide between 1 and 2 as the case may be).....						
15.	Paid for Terminating Stock matured. (Extend as in 11).....						
16.	Profits paid on (11) and (12). (Extend as into 11).....						
17.	Paid for Terminating Stock retired. (Extend into Col. 2).....						
18.	Terminating Stock forfeited or lapsed. (Extend into Col. 2).....						
19.	Terminating Stock converted into Permanent. (Extend into Col. 2).....						
20.	Terminating Stock revived. (Extend into Col. 1).....						

C.—Borrowed Money (other than foregoing) or Interest thereon Paid, viz:

21.	(a) Bank Account (Principal and Interest).....						
22.	(b) Deposits: Principal, \$..... Interest, \$.....						
23.	(c) Debentures issued in Canada: Principal, \$..... Interest, \$.....						
24.	(d) Debentures issued elsewhere: Principal, \$..... Interest, \$.....						
25.	(e) Debenture Stock issued in Canada: Principal, \$..... Interest, \$.....						
26.	(f) Debenture Stock issued elsewhere: Principal, \$..... Interest, \$.....						
27.	(g) Guarantees paid: Principal, \$..... Interest, \$.....						

D.—Management Expenses (other than foregoing):—

28.	(a) Salaries, Wages and Fees.....						
29.	(b) Commission or Brokerage.....						
30.	(c) Advances to Agents.....						
31.	(d) Stationery, Postage, Printing and Advertising.....						
32.	(e) Law Costs.....						
33.	(f) Fuel, Rent, Taxes (other than in 7 and 32) and Rates.....						
34.	(g) Travelling Expenses.....						
35.	(h) Registration Fees.....						
36.	(i) Other Management Expenditure.....						

E.—Other Expenditures, viz:—

37.	(a).....						
38.	(b).....						
39.	(c).....						

F.—Balance.

	\$	cts.
40.	(a) Cash on hand.....	
41.	(b) Cash in various banks as follows:	
42.	(i).....	
43.	(ii).....	
44.	(iii).....	
45.	(iv).....	

Totals.....

16 THE REPORT OF THE REGISTER OF LOAN CORPORATIONS. No. 11

EXPENDITURE FOR THE YEAR ENDING 31st DECEMBER, 1904.—Continued.

II.—EXPENDED ON TRUST OR AGENCY ACCOUNT.

Item No.	A.—Loaned or Invested on Capital Account.	Amount carried to Earnings, Maintenance or Contingent Account.		Amount carried to Capital Account.		Total.
		\$	c.	\$	c.	\$ c.
42. a	Loaned on Mortgages of Realty					
43. b	Loaned or invested on, or in other securities, viz.:					
44. i						
45. ii						
46. iii						
47. iv						
47. (a)	Real Estate purchased					
48. (b)	Incumbrances on Realty paid off, viz.:					
49. i	Principal					
49. ii	Interest					
	B.—Other Expenditures.					
50. (a)	Commission or Remuneration paid for Management of Estate, Trust or Agency (including item 25)					
51. (b)	Rents, Taxes and rates					
52. (c)	Debts or obligations wholly or partly paid: Principal, \$..... Interest, \$.....					
53. (d)						
	C.—Balance.					
54. (a)	Cash on hand	\$	cts.			
55. (b)	Cash in various banks, as follows:					
56. i						
57. ii						
57. iii						
	Totals					

SCHEDULE I.

PARTICULARS OF CERTAIN ASSETS. (Supra p. 3)
Assets (Items No. 22 to 25; and No. 37 to 42.)

Miscellaneous Statement for the year ending 31st December, 1904.

1.	Amount of Debentures issued by the Corporation in Canada which will mature in 1905	\$	c.
2.	Amount of Debentures issued by the Corporation elsewhere which will mature in 1905		
3.	Amount of other existing obligations of the Corporation which will mature in 1905		
4.	Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905		
5.	Average rate of interest per annum paid by the Corporation during 1904 on deposits?		
	on debentures?		
	on debenture stock?		
6.	Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty?		
	on other securities?		
7.	Of the mortgages held by the Corporation \$..... is on realty situate in Ontario, and \$..... is on realty situate elsewhere.		
8.	Loans written off or transferred to real estate account during 1904		
9.	Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. Number..... Amount.....		
10.	Aggregate market value of the land mortgaged to the Corporation?		
11.	How often are the securities held by the Corporation valued?		
12. (a)	What officers of the Corporation are under bond and for what sum respectively?		
	(b) Are the said bonds executed by private sureties or by Guarantee Companies?		
13.	Date when the accounts of the Corporation were last audited?		
14.	Names and addresses of the auditors respectively for 1904 and for 1905 (if appointed): For 1904..... For 1905.....		
15.	What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively?		
16.	What is the date appointed for the annual meeting?		
17.	Date of last annual meeting?		

County of

We, _____ President and _____ Secretary of the Loan Corporation known as the _____, severally make oath and say, and each for himself says, that we are the above described officers of the said Corporation, and that we have each of us individually the means of verifying the correctness of the statement within contained of the affairs of the said Corporation, and that on the 31st of December, 1904, all the above described assets were the absolute property of the said Corporation, free and clear from any liens or claims thereon, except as hereinbefore stated, and we are satisfied that the foregoing statement, with the schedules and explanations herein contained and hereunto annexed, is a full and correct exhibit of all the liabilities and assets and of the income and expenditure, and of the general condition and affairs of the said Corporation on the 31st day of December, 1904, and for the year ending on that day.

Sworn before me at the _____ in the County of _____ { President.
this _____ day of _____ A.D. 1905. { Secretary.

Attach to this Annual Statement a certified copy of the Statement or Statements furnished to shareholders during the year ending 31st December, 1904, also a copy of the Auditors' Certificate. Loan Corporations Act, sections 92, 93, and 100.

I. LOAN COMPANIES.

A. COMPANIES HAVING ONLY PERMANENT STOCK.

DETAILED REPORTS OF THE SEVERAL COMPANIES.

AGRICULTURAL SAVINGS AND LOAN COMPANY.

Head Office, London, Ont.

CONSTATING INSTRUMENTS.*

1872. Declaration of the Agricultural Investment Society and Savings Bank, under Consolidated Statutes of Upper Canada (1859) chap. 53, filed with the Clerk of the Peace for the County of Middlesex, Ontario, May 3rd, 1872.

1873. Instrument amalgamated the Society (under the above name) with the London Freehold and Leasehold Land Benefit Building Society, and with the London Union Savings, Loan and Permanent Investment Society; filed in above office, April, 1873.

1877, July 23. Order-in-Council, Canada, changing corporate name to Agricultural Savings and Loan Company.

1877, July 28. Order-in-Council, Ontario, making same change of corporate name.

Lending and borrowing powers. Derived from the successive Public General Acts of the Province:—Consolidated Statutes of Upper Canada, chap. 53; R. S. O. 1877, c. 164; R. S. O. 1887, c. 169; R. S. O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Agricultural Savings and Loan Company of London, Ont., at the 31st of December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 109 Dundas Street in the City of London, in the Province of Ontario.

The Board is constituted of five directors, holding office for one year.*

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:—

W. J. Reid, President, London, Ont.;	18th February, 1904;	16th February, 1905.
Thomas McCormack, Vice-Pres.	"	"
Thomas Beattie, Director,	"	"
Thomas H. Smallman, Director,	"	"
Moses Masuret, Director,	"	"
C. P. Butler, Secretary,	"	"

A. Permanent capital stock; total amount authorized, \$1,000,000; total amount subscribed \$630,200, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	No. of Shares.	Par value of shares.	Total amount held.	Total amount paid thereon.
		\$ c.	\$ c.	\$ c.
1. Fully paid.....	12,604	50 00	630,200 00	630,200 00

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904. (Not printed.)

*In this report the phrase "Constatting Instruments" is used as in law books to signify the document or collected documents which fix the purposes, constitution and powers of the corporation. The original instruments mentioned in this Report or copies of the originals are in nearly all cases filed in the Department of Insurance for Ontario.—J. H. H.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; Total called, \$....;		
total paid thereon	\$ 630,200 00	
4. (d) Dividends declared in respect of (1), but not yet paid	18,906 00	
5. (e) Unappropriated profits in respect of (1)	1,125 69	
6. (f) Reserve fund in respect of (1)	250,000 00	
		\$ 900,231 69

Liabilities to the Public.

27. Deposits	\$ 546,273 01	
29. Debentures payable in Canada	809,650 00	
30. Interest due and accrued on (29)	10,417 23	
31. Debentures payable elsewhere than in Canada	179,672 24	
32. Interest due and accrued on (31)	944 34	
39. Due on loans in process of completion or to pay assumed mortgages	25,231 80	
40. Other liabilities to the public, viz.:		
41. (a) Auditors and English agents	425 00	
		1,572,613 62
Total liabilities		\$2,472,845 31

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:—		
(1) At London, held in freehold		\$ 26,000 00

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$2,374,738 53	
10. (b) Debts secured by mortgaged land held for sale	8,902 55	
		2,383,641 08

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation		573 97
--	--	--------

E.—Cash.

31. (a) On hand	2,950 48	
32. (b) In bank	46,179 78	
		49,130 26

F.—Assets not Hereinbefore Mentioned.

37. (a) Office furniture	500 00	
38. (b) Rents accrued	500 00	
39. (c) Stocks	12,500 00	
		13,500 00

Total assets

\$2,472,845 31

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(Col. 1.)

(Col. 4.)

2. (i) On hand	2,383 43	
3. (ii) In bank	90,540 32	
		\$92,923 75

C.—Receipts on Account of Investments, Loans or Debts.

(a) On mortgages of realty:—

10. (i) Principal	284,317 00	
11. (ii) Interest	123,311 20	
(b) On other securities:—		
12. (i) Principal	2,004 11	
13. (ii) Interest or dividends	37 74	
		409,670 05

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (t) Rents, offices	\$2,590 00	2,590 00
------------------------------	------------	----------

E.—Miscellaneous.

18. (a) Commission refunded and sundry special receipts	1,291 95	1,291 95
---	----------	----------

F.—Borrowed Money.

26. (b) Borrowed by taking deposits, not including \$18,413.91 interest capitalized	794,357 71	
27. (c) Borrowed on debentures	403,497 97	
		1,197,855 68

G.—Receipts from other sources, viz.:

30. Bank interest, etc.	734 30	734 30
------------------------------	--------	--------

Totals

\$1,705,065 73

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		(Col. 1.)	(Col. 4.)
A.—Sums Loaned or Invested on Capital Account.			
1. (a) Loaned on mortgages of realty, less amount retained to pay prior mortgages	\$267,306 99		
7. (b) Incumbrances on realty paid off (assumed mortgages)	26,825 58		
			\$294,132 57
B.—Expended on Stock Account.			
8. Dividends on permanent stock	37,812 00		37,812 00
C.—Borrowed Money (other than foregoing) or Interest thereon paid, viz.:			
19. (b) Deposits: principal, \$875,206.49; interest, \$555.25	875,761 74		
20. (c) Debentures payable in Canada, principal, \$358,450.00; interest, \$31,803 36	390,253 36		
21. (d) Debentures payable elsewhere, principal, \$33,823.33; interest, \$6,689.48	40,512 81		
			1,306,527 91
D.—Management Expenses (other than foregoing).			
25. (a) Salaries, wages and fees	7,614 72		
26. (b) Commission or brokerage, etc.	5,829 86		
28. (d) Stationery, postage, printing and advertising	735 15		
29. (e) Law costs	60 23		
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	2,038 12		
31. (g) Travelling expenses	785 25		
32. (h) Registration fee	180 00		
			17,243 33
E.—Other Expenditures, viz.:			
33. (a) Repairs to company's building	219 66		219 66
F.—Balance.			
37. (a) Cash on hand and in banks			49,130 26
Totals			\$1,706,065 73

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation payable in Canada which will mature in 1905, \$348,009.00.
2. Amount of debentures issued by the Corporation payable elsewhere which will mature in 1905, \$41,610.00.
3. Amount of other existing obligations of the Corporation which will mature in 1905, exclusive of deposits. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$296,380.19.
5. Average rate of interest per annum paid by the Corporation during 1904; on deposits, 3.31 per cent.; on debentures, 4.01.
6. Average rate of interest received by the Corporation during 1904 on mortgages of realty, 5.905 per cent.
7. Of the mortgages held by the Corporation \$2,383,641.08 is on realty situate in Ontario, and none on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$6,915.50.
9. Number and aggregate amount of mortgages which upon compulsory proceedings have been taken by the Corporation in 1904, number 5, amount, \$18,550.15.
10. Aggregate market value of the land mortgaged to the Corporation, \$4,853,709.00.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$10,000; accountant, \$2,000; teller, \$15,000; ledger-keeper, \$2,000; inspector, \$2,000. All by Guarantee Bonds, except \$5,000.
13. When were the accounts of the Corporation last audited? Quarter ending 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905. For 1904: Geo. F. Jewell, F.C.A., and Andrew Dale. For 1905: Geo. F. Jewell, F.C.A., and Andrew Dale.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January and 2nd July at rate of six per cent. per annum.
16. What is the date appointed for the Annual Meeting? 16th February, 1905.
17. Date of last Annual Meeting? 18th February, 1904.

THE BRITISH CANADIAN LOAN AND INVESTMENT COMPANY, LIMITED.

Head Office, Toronto, Ont.

CONSTATING INSTRUMENTS.

Incorporated on 12th April, 1876, by Special Act of Canada, 39 V. c. 57, which was amended by 40 V. (1877) c. 76 (D); and by 50-51 V. c. 110 (D).

For the lending powers. See 39 V. (1876) c. 57 (D) s. 3, as amended by 40 V. c. 76 (D)

As to the agency and guarantee powers. See 40 V. (1877) c. 76 (D) Secs. 1, 6, 7.

As to the borrowing powers. See 50-1 V. (1887) c. 110 (D) secs. 1, 6, 7.

As to the lending and the borrowing powers. See also L. Corp. Act, R.S.O. 1897, Chap. 205.

ANNUAL STATEMENT

Of the condition and affairs of the British Canadian Loan and Investment Company (Limited), of Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 24 Adelaide Street East, in the City of Toronto, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

A. H. Campbell, President, Toronto, Ont.;	3rd February, 1904;	1st February, 1905
William Ince, Vice-President, Toronto, Ont.;	"	"
Samuel Trees, Director, Toronto, Ont.;	"	"
W. R. Brock, Director, Toronto, Ont.;	"	"
Henry Pellatt, Director, Toronto, Ont.;	"	"
A. H. Campbell, Jr., Director Toronto, Ont.;	"	"
Hon. S. H. Blake, K.C., Toronto, Ont.;	"	"
Ernest S. Ball, Manager, Toronto, Ont.		

A.—Permanent capital stock; total amount authorized, \$5,000,000; total amount subscribed, \$2,000,000.

SCHEDULE A.

(b) Fixed and Permanent capital stock created by virtue of Private Acts.

Description.	No. of shares.	Par value.	Total amount held.	Total amount paid thereon.	Total remaining unpaid.
1. 20 per cent. called.....	20,000	\$ 100	\$ 2,000,000	\$ 398,581 87	
Total.....	20,000		2,000,000	398,581 87	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

Dr.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).	
A.—Permanent capital stock or shares.	
2. (b) Ordinary joint stock capital, 20 per cent. called; total called, \$398,581.87; total paid thereon	\$398,581 87
4. (d) Dividends declared in respect of (2) but not yet paid	9,964 55
5. (e) Unappropriated profits in respect of (2)	14,477 24
6. (f) Reserve fund in respect of (2)	70,000 00
Carried forward	\$493,023 66
NOTE.—Liabilities reported in 1903 under A, but written off in 1904, (not extended): Dividend, \$5,694.14.	

Dr. **BALANCE SHEET.—Continued.**

Brought forward \$493 023 66

Liabilities to the Public.

31. Debentures issued elsewhere than in Canada	334,821 93	
32. Interest due and accrued on (31)	2,510 24	
46. Other liabilities to the public, viz.:		
41. (a) Due agents in Edinburgh	73 30	
42 (b) Sundry amounts due to borrowers and customers	1,249 62	
		338,655 09
Total		\$831,678 75

Cr.

Assets.**I. Assets of which the Corporation is the Beneficial Owner.****A.—Immovable Property Owned Beneficially by the Corporation.**

5. (b) Freehold land (including buildings) other than foregoing .. \$44,930 77

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$410,506 64	
10. (b) Debts secured by mortgaged land held for sale	20,323 64	
(bb) Debt secured by land held by the company as mortgagee in possession, or secured by land for the rents and profits of which the company is accountable. See 10 (b).		
11. (c) Interest due or accrued on items 9 and 10 and not included therein	14,163 23	
		446,013 71

C.—Debts not above Enumerated for which the Corporation hold Securities as follows:

15. (c) Debts secured by Public School Debentures	\$ 990 00	
22. (j) Debts secured by collateral securities, stocks	282,829 13	
23. (k) Debts secured by mortgages, being disbursements repayable by borrowers	271 18	
26. (n) Interest due or accrued on items 15, 22 and 23 and not included therein	59 00	
		284,149 31

E.—Cash.

31. (a) Cash on hand	\$1,151 35	
32. (b) In banks:		
In Canada	12,111 86	
In Britain	29,262 77	
		42,525 98

F.—Assets not hereinafter Mentioned.

37. (a) Stock in Royal Bank of Scotland, London, England	15,658 98	
--	-----------	--

Total assets **\$831,678 75****CASH ACCOUNT.****Receipts for the year ending 31st December, 1904.****I.—Received by the Corporation for Its Own Use.****A.—Balance from 31st December, 1903.**

2. (i) On hand	\$ 382 60	
3. (ii) In bank	20,027 72	
		\$20,410 32

B.—Sums received Wholly or Partly on Capital Stock.

Amount required to convert 30 sterling shares into currency shares 16 00

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:		
10. (i) Principal	\$179,746 43	
11. (ii) Interest	49,088 48	
(b) On other securities:		
12. (i) Principal on collaterals (stock loans)	405,310 61	
13. (ii) Interest or dividends (included in No. 11).		
		634,145 52

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales	\$3,651 10	
17. (b) Rents	1,023 41	
		4,674 51

E.—Miscellaneous.

18. (a) Commission or brokerage	465 66	465 66
---------------------------------------	--------	--------

G.—Receipts from other sources, viz.:

30. (a) Agents in Great Britain	\$ 241 08	
(b) Received from sundry persons	633 32	
(c) Sundry accounts	1,787 80	
(d) Disbursements repaid by mortgagors	1,688 41	
(e) Office furniture	80 00	
		4,430 61

Totals **\$664,142 62**

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I. Expended on Corporation Account.			
A.—Sums loaned or invested on Capital Account.			
1. (a) Loaned on mortgages of realty	\$1,420 54		
(b) Loaned or invested in other securities, viz.:			
2. (i) On collaterals (stock loans)	370,690 00		\$372,110 54
7. (d) Incumbrances on realty paid off	2,095 66		
(e) Insurance or taxes advanced on property mortgaged to the Company	1,675 71		3,771 37
B.—Expended on Stock Account.			
8. Dividends on permanent stock	19,928 29		19,928 29
C.—Borrowed money (other than foregoing) or interest thereon paid, viz.:			
20. (c) Debentures issued in Canada: Principal, \$4,000.00; interest, \$156.87	4,156 87		
21. (d) Debentures issued elsewhere: Principal, \$192,549.65; interest, \$18,655.60	211,205 25		215,362 12
D.—Management expenses (other than foregoing).			
25. (a) Salaries, wages and fees (directors' and auditors' fees)	\$4,063 99		
26. (b) Commission or brokerage	408 90		
27. (c) Advances to agents	349 75		
28. (d) Stationery, postage, printing and advertising	193 11		
29. (e) Law costs	600 00		
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	1,692 74		
31. (g) Travelling expenses			
32. (h) Registration fees			
33. (i) Scottish expenses		262 02	7,510 51
E.—Other expenditures, viz.:			
34. (a) Taxes, repairs, etc., on properties owned beneficially by the Company	2,557 70		
35. (b) Exchange	376 11		2,933 81
F.—Balance.			
37. (a) Cash on hand and in banks			42,525 96
Totals			\$664,142 62

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

- Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
- Amount of debentures issued by the Corporation elsewhere which will mature in 1905, \$222,893.33.
- Amount of other existing obligations of the Corporation which will mature in 1905. None.
- Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. Estimated \$343,865.14.
- Average rate of interest per annum paid by the Corporation during 1904. On deposits, none; on debentures, 3.74 per cent.; on debenture stock, none.
- Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, and on other securities, 5.85 per cent.
- Of the mortgages held by the Corporation, \$324,371.48 is on realty situate in Ontario, and \$86,155.36 on realty elsewhere.
- Loans written off or transferred to real estate account during 1904, \$1,517.07.
- Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 2; amount, \$2,265.80.
- Aggregate market value of land mortgaged to the Corporation. Estimated \$841,377.32.
- How often are the securities held by the Corporation valued. At end of the Company's financial year.
- (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$5,000; Accountant, \$2,000.
(b) By Guarantee Company.
- When were the accounts of the Corporation last audited? 31st December, 1904.
- Names and addresses of the auditors respectively for 1904 and 1905. For 1904: H. W. Eddis, F.C.A., Toronto, and T. McCleary, Toronto. For 1905: Not yet appointed.
- What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 30th June and 31st December. 5 per cent.
- What is the date appointed for the Annual Meeting? 1st February, 1905.
- Date of last Annual Meeting? 3rd February, 1904.

THE BRITISH MORTGAGE LOAN COMPANY OF ONTARIO.

Head Office, Stratford, Ontario.

CONSTATING INSTRUMENTS.

Incorporated by Letters Patent of Ontario, dated October 5th, 1877 (Lib. 5, No. 52), issued under R. S. O. 1877, c. 150, which Act was continued by R. S. O. 1887, c. 157, and was as to Loan Corporations superseded by 60 V. c. 38 (O), now R. S. O., 1897, c. 205.

The lending and the borrowing powers of the company are derived from its Letters Patent and the above public general Statutes.

ANNUAL STATEMENT

Of the condition and affairs of The British Mortgage Loan Company of Ontario at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at Market street, in the City of Stratford, in the Province of Ontario.

The Board is constituted of eight directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Hon. Thomas Ballantyne, President, Stratford; 19th Sept., 1892, 26th January, 1905.
 John McMillan, Vice-President, Stratford; 6th June, 1898,
 John W. Scott, Director, Listowel; 16th July, 1877, "
 George Innes, Director, Woodstock; 12th January, 1883, "
 John Parker, Director, Stratford; 8th January, 1880, "
 Herbert M. Johnson, Director, Stratford, 6th June, 1898, "
 Robert Morton, Director, Hamilton; 16th December, 1899, "
 James Trow, Director, Stratford, 5th December, 1904 "
 Wm. Buckingham, Manager and Secretary, Stratford; 26th Dec. 1878, Undetermined.

A. Permanent capital stock: Total amount authorized, \$5,000,000; total amount subscribed, \$450,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and Permanent Capital Stock created by virtue of Joint Stock Companies' Act or Private Acts.

Description.	No. of shares.	Par value.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
1. Fully called.....	4,500	\$ 100	\$ 450,000	\$ 437,308 71 c.	\$ 12,691 29 c.
Totals.....	4,500	100	450,000	437,308 71	12,691 29

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called \$450,000;		
total paid thereon	\$437,308 71	
4. (d) Dividends declared in respect of (1), but not yet paid	13,118 93	
5. (e) Unappropriated profits in respect of (1)	5,162 48	
6. (f) Reserve fund in respect of (1)	170,000 00	
		\$625,590 12

Liabilities to the Public.

27. Deposits (including unclaimed deposits); payable on notice	\$527,879 49	
28. Interest on deposits, due or accrued or capitalized	17,375 26	
29. Debentures issued in Canada	220,175 00	
30. Interest due and accrued on (29)	2,508 30	
37. Owing to banks (including interest due or accrued)	38,075 83	
		806,013 88
Total liabilities		\$1,431,604 00

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:	
2. (i) At Stratford, held in freehold	\$6,000 00

B.—Debts Secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land ..	1,416,236 00
12. (d) Of the debts mentioned in item 9 the sum of \$725.00 is due by directors or officers of the Corporation. Not extended.	

C.—Debts not above enumerated for which the Corporation holds Securities as follows:

20. (h) Debts secured only by Permanent Stock or Shares of the Corporation	9,368 00	
Total assets		\$1,431,604 00

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use. (Col. 1.) (Col. 3.) Col. 4.)

A.—Balance from 31st December, 1903.

1. (b) Cash not already shown under (1):		
3. In bank	7,173 61	7,173 61

B.—Sums Received Wholly or Partly on Capital Stock.

4. (a) Calls on Joint Stock Permanent Capital	\$1,458 76	\$1,458 76
---	------------	------------

C.—Receipts on Account of Investments, Loans or Debts.

(a) On mortgages of realty:—		
10. (i) Principal and interest	\$321,605 58	
11. (ii) General interest, including interest on bank balances	620 65	
(b) On other securities:—		
12. (i) Principal and interest—Company's stock	1,649 85	
		323,876 08

F.—Borrowed Money.

25. (a) Bank overdraft	\$38,075 83	
26. (b) Borrowed by taking deposits	540,197 16	
27. (c) Borrowed on debentures	74,418 30	652,691 29
Total	\$983,740 98	\$1,458 76
		\$985,199 74

CASH ACCOUNT.—Continued.
Expenditure for the year ending 31st December, 1904.

I. Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Col. 4.)
1. (a) Loaned on mortgage of realty	\$308,335 52	
(b) Loaned or invested in other securities:—		
2. (i) Company's stock	2,870 00	
		\$311,205 52

B.—Expended on Stock Account.

1. Dividends paid on permanent stock	\$26,168 91	26,168 91
--	-------------	-----------

C.—Borrowed Money (other than foregoing) or Interest thereon paid:

19. (b) Deposits: Principal, \$569,450.61; interest, \$18,075.65	587,526 26	
20. (c) Debentures issued in Canada: Principal, \$44,990.40; interest, \$7,775.62	52,766 02	
		640,292 28

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$4,794 17	
26. (b) Commission on loans and inspection of lands	1,158 83	
28. (d) Stationery, postage, printing and advertising	447 50	
29. (e) Law costs	7 75	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	490 11	
32. (h) Registration fee	110 00	
		7,008 36

E.—Other Expenditures, viz.:—

34. (a) Grants to President and Vice-President and Manager	\$450 00	
35. (b) Caretaking, cleaning and sundries	74 67	
		524 67
Totals	\$985,199 74	\$985,199 74

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$40,435.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$103,900.00.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3 per cent.; on debentures, 4.02 per cent. There is no debenture stock.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 5.10 per cent.; on other securities, 5.10 per cent.
7. Of the mortgages held by the Corporation, \$1,416,236.00 is on realty situate in Ontario, and none elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$2,421,200.00.
11. How often are the securities held by the Corporation valued Always yearly. Sometimes oftener.
12. (a) What officers of the Corporation are under bond and for what sum respectively? The Manager, \$10,000. The only other officer is the Accountant, and the Manager is responsible for his fidelity. By private sureties.
13. When were the accounts of the Corporation last audited? January 9th, 1905.
14. Name and addresses of the auditors respectively for 1904 and 1905. For 1904: C. J. Macgregor, M. A., and Geo. Hamilton, Stratford, Ont., to end April, 1904, and George Hamilton and Wm. Irwin to 31st Dec. 1904, Stratford, Ont. For 1905: George Hamilton and Wm. Irwin, Stratford, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January and 2nd July, 1904, rate 6 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 26th January, 1905.
17. Date of last Annual Meeting? 28th January, 1904.

THE BROCKVILLE LOAN AND SAVINGS COMPANY.

Head Office, Brockville, Ont.

CONSTATING INSTRUMENTS.

Incorporated by declaration filed 11th May, 1885, with the Clerk of the Peace for the United Counties of Leeds and Grenville. The declaration was made by virtue of the "Building Societies Act," R. S. O. 1877, c. 164, continued by R. S. O. 1887, c. 169, and superseded by 60 V. c. 38 (O), now R. S. O. 1897, c. 205.

The lending and borrowing powers are derived from the above public General Acts.

ANNUAL STATEMENT

Of the condition and affairs of the Brockville Loan and Savings Company, Limited, of Brockville, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at Court House Avenue, in the Town of Brockville, in the Province of Ontario.

The Board is constituted of seven directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

W. H. Cole, President	Brockville, 1st, January, 1905,	31st December, 1905.
D. W. Downey, Vice-President,	Brockville,	" "
W. A. Gilmour, Director,	Brockville	" "
D. Derbyshire, Director,	Brockville.	" "
John H. Fulford, Director,	Brockville,	" "
Edwin Abbott, Director,	Brockville,	" "
D. B. Jones, Managing Director,	Brockville,	" "
H. B. White, Secretary-Treasurer,	Brockville,	" "

A. Permanent capital stock; total amount authorized, \$500,000; total amount subscribed, \$350,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Last call made: Date 30th June, 1903, rate per cent., 10 per cent.

Gross amount, \$35,000; amount paid thereon, \$21,352.50.

Description.	No. of shares.	Par value.	Total amount held.	Total amount paid thereon.	Total remaining unpaid.
		\$	\$ c.	\$ c.	\$ c.
Totals.....	7,000	50	350,000 00	201,352 50	148,642 50

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. Ordinary joint stock capital fully called; total called,; total paid thereon	\$201,357 50	
4. (d) Dividends declared in respect of (1), but not yet paid	6,039 32	
6. (f) Reserve fund in respect of (1)	20,000 00	
7. (g) Contingent fund in respect of (1)	5,500 00	
		\$232,896 82

Liabilities to the Public.

27. Deposits payable on demand including interest to December 31st, 1904	\$185,309 19	185,309 19
Total liabilities		\$418,206 01

Cr. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land....	\$362,588 38	
10. (b) Debts secured by mortgaged land held for sale	39,500 00	
		\$402,088 38

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by Permanent Stock or Shares of the Corporation	\$6,283 96	6,283 96
--	------------	----------

E.—Cash.

31. (a) On hand	1,237 22	
32. (b) In bank, Brockville	8,306 45	
		9,543 67

F.—Assets not hereinbefore mentioned.

37. (a) Furniture		290 00
Total assets		\$418,206 01

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

Received by the Corporation for its Own Use

A.—Balance from 31st December, 1903.

1. (b) Cash not already shown under (1):	
2. (i) On hand	\$ 537 11
3. (ii) In bank	4,873 35

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on Joint Stock Permanent Capital	2,052 50
---	----------

C.—Receipts on account of Investments, Loans or Debts.

(a) On Mortgages of Realty—

10. (i) Principal	65,017 06
11. (ii) Interest	23,586 88

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	91,488 67
Totals	\$187,555 57

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I. Expended on Corporation Account.	
A.—Sums Loaned or Invested on Capital Account.	Total (Col. 4.)
1. (a) Loaned on Mortgages of Realty	\$59,522 33
(b) Loaned or invested in other securities—	
2. (1) On permanent stocks	3,097 50
B.—Expended on Stock Account.	
3. Dividends paid on Permanent Stock	11,972 63
C.—Borrowed Money (other than foregoing) or interest thereon paid.	
19. (b) Deposits: Principal and interest	100,465 66
D.—Management expenses (other than foregoing)	2,953 79
F.—Balance.	
20. (a) Cash on hand and in bank	9,543 65
Total	\$187,555 57

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, $3\frac{1}{2}$ per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 6 per cent.
7. Of the mortgages held by the Corporation \$402,088.38 is on realty situate in Ontario, — is on realty situated elsewhere.
8. Loans written off or transferred to real estate account during 1904. One. \$24,000.00.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904 number, 1; amount \$24,000.00.
10. Aggregate market value of the land mortgaged to the Corporation, \$650,000.00.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Managing Director, \$10,000; Secretary-Treasurer, \$10,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? December 31st 1904.
14. Names and address of the auditors for 1904 and 1905 (if appointed). For 1904: James Reynolds, Brockville and George McLean, Brockville. For 1905: George McLean, Brockville, and J. W. Ridgeway.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 15th January and 15th July. Dividends paid at rate of 6 per cent.
16. What is the date appointed for the Annual Meeting? First Wednesday in February.
17. Date of last Annual Meeting? 3rd February, 1904.

CANADA LANDED AND NATIONAL INVESTMENT COMPANY (LIMITED).

Head Office, Toronto, Ontario.

CONSTATING INSTRUMENTS.

This Company was in 1891 constituted by an amalgamation of (I) The Canada Landed Credit Company with (II) The National Investment Company of Canada (Limited), and by the re-incorporation of the amalgamated Company. Of the two Companies so amalgamated:—

I. The Canada Landed Credit Company had been incorporated in 1858 by Special Act of the Province of Canada, 22 V. c. 133; a Special Act of 1859, 22 V. c. 105, increased the capital; the two foregoing Acts were amended by 29-30 V. (1866-7) c. 125. In 1873, an Act of Ontario, 36 V. c. 122, amended 22 V. c. 133, supra; in 1874 the powers of the Company were extended by 38 V. c. 73 (O.); in 1875-6 the capital was further increased by 39 V. c. 97 (O); in 1882 the special Acts of 1858 and 1859 supra were amended by 45 V. c. 72 (O.). In 1882 the special Act of Canada, 45 V. c. 110 extended the Company's operations to Manitoba and the Northwest Territories. In 1890 the Special Act of Ontario, 53 V. c. 128, authorized the Company to issue debenture stock, to become amalgamated with other Companies, etc. In 1891, Letters Patent of Canada, dated January, 1891, authorized the amalgamation of the Company with the National Investment Company of Canada. In 1891, Letters Patent of Ontario, dated 12th of February, authorized the same amalgamation.

II. The National Investment Company of Canada had been incorporated by Letters Patent of Canada, dated 21st August, 1882, issued under 40 V. c. 43 (D.)

For the powers of the amalgamated Company, see the Letters Patent above cited; see also R.S.C. 1886, secs. 88-98, and sec. 101; see also the Loan Corporations Act, R.S.O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Canada Landed and National Investment Company, Limited, Toronto, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at 23 Toronto Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of twelve directors holding office for one year.

The Directors and chief executive officers of the Corporation at 31st December, 1904, were as follows, together with their respective terms of office:

John L. Blaikie, President, Toronto;	27th January 1904, 25th January, 1905.
John Hoskin, K.C., LL.D., Vice-President, Toronto;	27th January, 1904, 25th January, 1905.
Sir John A. Boyd, LL.D., K.C.M.G., Director, Toronto;	27th January, 1904, 25th January, 1905.
Alfred Hoskin, K.C., Director, Toronto;	27th January, 1904, 25th January, 1905.
D. E. Thomson, K.C., LL.D., Director	" "
Hon. Senator Gowan, LL.D., C.M.G., Director, Barrie,	" "
J. Kerr Osborne, Director, Toronto,	" "
J. S. Playfair, Director, Toronto,	" "
Newman Silverthorn, Director, Summerville,	" "
John Stuart, Director, Toronto,	" "
Frank Turner, C.E., Director, Bracondale,	" "
Hon. Jas. Young, Director, Galt,	" "
Edward Saunders, Manager, Toronto,	" "

A. Permanent capital stock; total amount authorized, \$4,000,000; total amount subscribed, \$2,008,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies' Acts or Private Acts.

Description.	No. of shares.	Par value.	Total amount held.	Total amount paid thereon.	Total remaining unpaid calls.
1. 50 per cent called	20,080	\$ 100	\$ 2,008,000	\$ 1,004,000	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital, 50 per cent. called; total called, \$1,004,000; total paid thereon	\$1,004,000 00	
4. (d) Dividends declared in respect of (2), but not yet paid	31,262 75	
5. (e) Unappropriated profits in respect of (2)	1,572 57	
6. (f) Reserve fund in respect of (2)	400,000 00	
7. (g) Contingent fund in respect of (2)	33,081 29	
		\$1,469,916 61

Liabilities to the Public.

29. Debentures issued in Canada	\$242,483 33	
30. Interest due and accrued on (29)	2,724 00	
31. Debentures issued elsewhere than in Canada	2,580,880 91	
32. Interest due and accrued on (31)	12,922 30	
37. Owng to banks (including interest due or accrued)	8,037 55	
40. Other liabilities to the public, viz.:		
41. (a) Balances at credit of borrowers on Sinking Fund loans and loans in progress	22,857 35	
		2,869 905 44
Total liabilities		\$4,339,822 05

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property owned Beneficially by Corporation.

1. (a) Office premises situate as follows:—		
2. (i) At Toronto, held in freehold	\$40,000 00	
6. (c) Leasehold land (including buildings) other than foregoing	22,440 86	
5. (b) Freehold land (including buildings) other than foregoing		\$62,440 86

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$3,417,706 98	
10. (b) Debts secured by mortgaged land held for sale	135,585 27	
11. (c) Interest due or accrued on items 9 and 10 and not included therein	119,032 67	
		3,672,324 92

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Municipal Bonds or Debentures owned by the Company	\$166,078 28	
15. (c) Public School Debentures owned by the Company	231,437 61	
18. (f) Stocks or bonds of Provinces of Canada owned by Company	20,000 00	
22. (j) Ontario Government Script owned by the Company	24,469 50	
23. (k) Electric Light Company's Bonds owned by Company	1,000 00	
24. (l) Loans on collateral security of stocks	86,971 75	
26. (n) Interest due or accrued on items 14 to 24 and not included therein	9,707 17	
		539,664 31

E.—Cash.

31. (a) On hand	\$1,168 63	
32. (b) In banks in Canada	62,011 63	
		63,180 26

F.—Assets not hereinbefore Mentioned.

37. (a) Advances on account of borrowers	2,211 70	
--	----------	--

Total assets		\$4,339,822 05
--------------	--	----------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for Its Own Use.

A.—Balance from 31st December, 1903.

(b) Cash not already shown under (1):

2. (i) On hand	\$ 334 26	
3. (ii) In bank	126,661 54	

C.—Receipts on Account of Investments, Loans or Debts.

(a) On Mortgages of Realty:—		
10. (i) Principal	607,650 01	
11. (ii) Interest	209,006 18	
(iii) Insurances advanced by Company	6,467 28	
(b) On other securities:—		
12. (i) Principal	352,183 16	
13. (ii) Interest or dividends	26,759 65	

D.—Receipts from Real Estate Owned Beneficially by the Corporation.

17. (b) Rents	10,385 77	
---------------	-----------	--

CASH ACCOUNT.—Continued.—Receipts for the year ending 31st December, 1904.

F.—Borrowed Money.		
25. (a) Bank or other advances, discounts or overdrafts	8,037 55	
27. (b) Borrowed on debentures	525,989 26	
G.—Receipts from other sources, viz.:		
30. (a) Interest on bank account	2,076 95	
Totals	\$1,875,551 61	\$1,875,551 61

CASH ACCOUNT.

I. Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		
1. (a) Loaned on mortgages of realty		\$738,754 82
(b) Loaned or invested in other securities:		
3. (ii) Debentures purchased	161,349 45	
4. (iv) Loans on stocks	160,077 57	
7. (d) Incumbrances on realty paid off	4,864 33	
(e) Insurances or taxes advanced or property mortgaged to the Corporation ..	5,894 23	
B.—Expended on Stock Account.		
8 Dividends paid on permanent stock	60,157 50	
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:		
20. (c) Debentures issued in Canada; Principal, \$53,903.33; interest, \$9,636.40 ..	63,539 73	
21. (d) Debentures issued elsewhere: Principal, \$468,076.01; interest, \$102,315.41 ..	570,391 42	
D.—Management Expenses (other than foregoing).		
25. (a) Salaries and fees	20,448 75	
26. (b) Commission or brokerage	13,715 56	
28. (d) Stationery, postage, printing and advertising	1,522 41	
29. (e) Law costs	11 00	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	4,194 29	
31. (g) Travelling expenses	1,078 75	
32. (h) Registration and filing fees	210 00	
E.—Other Expenditure.		
34. (a) Insurance and Guarantee Premiums	317 04	
35. (b) Office fittings and furniture	708 15	
36. (c) Payments on account of properties	5,097 27	
Exchange	39 08	
F.—Balance.		
37. (a) Cash on hand and in banks	63,180 26	
Totals	\$1,875,551 61	

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$40,580.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, \$589,543.00.
3. Amount of existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$325,193.00.
5. Average rate of interest per annum paid by the Corporation during 1905 on deposits, nil per cent.; on debentures, 3.97 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 6.37 per cent.; on other securities, 5.25 per cent.
7. Of the mortgages held by the Corporation, \$1,727,992.91 is on realty situate in Ontario, and \$1,847,740.20 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$1,367.00.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. Number 1; amount \$250.
10. Aggregate market value of the land mortgaged to the Corporation, about, \$9,250,000.
11. How often are the securities held by the Corporation valued? Annually in the case of doubtful loans.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, Toronto, \$5,000; Accountant and Cashier, Toronto, \$2,000 each, one Clerk, \$2,000; Local Manager and Accountant in Winnipeg, \$5,000 and \$3,000 respectively; one Clerk, \$2,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? Audited to 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed)? For 1904, H. W. Williamson and T. E. P. Trew, Toronto. J. B. Pepler, Winnipeg. For 1905, not yet appointed.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January and 2nd July, 6 per cent.
16. What is the date appointed for the Annual Meeting? 25th January, 1905.
17. Date of last Annual Meeting? 27th January, 1904.

CANADA PERMANENT MORTGAGE CORPORATION.

Head Office, Toronto, Ont.

CONSTATING INSTRUMENTS.

This Company was under the provisions of the special Act of Ontario, 63 V. c. 129, formed by the amalgamation of the Canada Permanent Loan and Savings Company, the Western Canada Loan and Savings Company, the Freehold Loan and Savings Company, and the London and Ontario Investment Company: 63 Vic. c. 129 (Ont.) See also special Act of Canada, 62 V. c. 101 (D.)

ANNUAL STATEMENT

Of the condition and affairs of the Canada Permanent Mortgage Corporation of Toronto at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at Nos. 14 and 18 Toronto Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of—directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

George Gooderham, President, Toronto; February, 1904; February, 1905		
J. Herbert Mason, Vice-President, Toronto;	"	"
W. H. Beatty, Vice-President, Toronto;	"	"
W. G. Gooderham, Director,	"	"
W. D. Matthews,	"	"
Ralph K. Burgess,	"	"
Geo. W. Monk,	"	"
S. Nordheimer,	"	"
Frederick Wyld,	"	"
Geo. F. Galt, Director, Winnipeg, Man.;	"	"
R. T. Riley,	"	"
J. M. Robinson, " St. John, N.B.;	"	"
R. S. Hudson, Asst. General Manager, Toronto;	"	"
George H. Smith, Secretary, Toronto;	"	"

A. Permanent capital stock; total amount authorized, \$20,000,000; total amount subscribed, \$5,951,350, as more particularly set out in Schedule A. hereto.

SCHEDULE A

Fixed and Permanent Capital Stock.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining uncalled.
1. Fully called and paid.....	505,135	\$ 10	\$ 5,951,350	\$ 5,951,350	\$

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called and paid	\$5,951,350 00
4. (d) Dividends declared in respect of (1), but not yet paid	178,604 40
5. (e) Unappropriated profits in respect of (1)	63,934 56
6. (f) Reserve Fund in respect of (1)	2,000,000 00
7. (g) Contingent Fund in respect of (1) (see (5)).	

Carried forward \$8,193,888 96

BALANCE SHEET.—Continued.

Brought forward		\$8,193,838 96
Liabilities to the Public.		
27. Deposits payable on demand, \$712,151.94; on notice, \$2,022,425.27..	\$2,734,577 21	
28. Interest on deposits capitalized during the year and included in No. 27.		
29. Debentures issued and payable in Canada	3,722,794 05	
30. Interest due and accrued on (29)	45,000 00	
31. Debentures issued in Canada payable elsewhere	8,899,434 96	
32. Interest due and accrued on (31)	43,980 00	
33. Debenture stock issued in Canada and payable elsewhere	438,000 00	
34. Interest due and accrued on (33)	8,760 00	
37. Owing to banks	23,818 62	
40. Other liabilities to the public, viz.:		
41. (a) Commission and sundry unpaid accounts, etc.	12,703 91	
		\$15,929,068 75
Total liabilities		\$24,122,957 71
<hr/>		
Cr.	Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property Owned Beneficially by Corporation.		
1. (a) Office premises situate as follows		
2. (i) At Toronto held in freehold	\$263,373 24	
3. (ii) At Winnipeg, held in freehold	88,223 73	
5. (b) Freehold land (including buildings other than foregoing)	786 16	
		\$352,383 13
B.—Debts secured by Mortgages of Land.		
9. (a) Debts (other than item 10) secured by mortgages of land....	\$21,221,364 90	
10. (b) Debts secured by mortgaged land held for sale	19,315 72	
11. (c) Interest due and accrued on items 9 and 10 and not included therein	313,943 70	
		21,554,624 32
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
14. (b) Municipal bonds or debentures owned by Corporation	\$401,175 26	
15. (c) Public School Debentures owned by Corporation	60,811 72	
16. (d) Debenture stock owned by Corporation	19,221 65	
20. (h) Debts secured only by Permanent Stock or Shares of the Corporation	137,327 48	
22. (j) Advances on bonds and stocks not owned by Corporation	1,243,405 54	
		1,861,941 66
E.—Cash.		
31. (a) On hand	\$35,025 64	
32. (b) In banks in Canada	318,982 97	
		354,008 61
Total assets		\$24,122,957 71

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.		
A.—Balances from 31st December, 1903.		
2. (i) On hand	\$11,021 57	
3. (ii) In bank	192,625 00	
C.—Receipts on account of Investments, Loans and Debts.		
(a) On mortgages of realty:—		
10. (i) Principal and charges	3,314,113 93	
11. (ii) Interest	1,173,022 19	
(b) On other securities:—		
12. (i) Principal	1,536,569 24	
13. (ii) Interest	91,341 26	
D.—Receipts from Real Estate owned Beneficially by Corporation.		
17. (b) Rents	2,286 22	
Carried forward		\$6,320,979 41

CASH ACCOUNT.—Continued.

Receipts for the year ending 31st December, 1904.

Brought forward	\$6,323,379 41
B.—Borrowed Money	
25. (a) Bank advances	23,878 62
26. (a) Borrowed by taking deposits	2,197,922 71
27. (a) Borrowed on debentures	1,195,237 98
Totals	\$9,738,964 72

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I Expended on Corporation Account.	
A.—Money loaned or invested on Capital Account.	
1. (a) Loaned on mortgages of realty	\$3,991,664 38
(b) Loaned or invested in other securities.—	
2. (i) Loans on bonds and stocks, etc.	1,373,452 25
(ii) Loans on Corporation's stock	22,742 70
4. (iii) Bonds purchased	23,215 87
B. Expended on Stock Account.	
3. Dividends paid on permanent stock	357,081 00
C. Borrowed Money (other than foregoing) or interest thereon paid, viz.:	
18. (a) Bank account (principal and interest)	232,606 65
19. (b) Deposits: Principal and interest	1,824,685 07
20. (a) Debentures issued and payable in Canada: Principal, \$322,156.19; Interest, \$144,522.54	466,678 73
21. (a) Debentures issued in Canada, payable elsewhere: Principal, \$483,547.60; interest, \$333,257.10	817,803 70
23. (f) Debenture stock issued in Canada, interest payable elsewhere..	16,801 53
D.—Management Expenses (other than foregoing).	
27. (a) Advances to agents	50,409 45
28. (d) Stationery, postage, printing, advertising, salaries, travelling expenses, directors' and auditors' fees, etc.	198,493 30
29. (a) Law costs	770 02
32. (h) Registration fees Municipal and Government taxes, etc.	7,765 14
E. Other Expenditure, viz.:	
33. (a) Alterations to Corporation's buildings	786 32
F.—Balance.	
37. (a) Cash on hand and in bank	354,008 61
Totals	\$9,738,964 72

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of Debentures issued by the Corporation in Canada which will mature in 1905, \$1,037,215.00.
2. Amount of Debentures issued by the Corporation in Canada, payable elsewhere, which will mature in 1905, \$1,626,790.40.
3. Amount of other existing obligations of the Corporation which will mature in 1905, excluding deposits. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905 approximately, \$5,000,000.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.5 per cent.; on debentures 3.86 per cent.; on debenture stock 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty and other securities, 6.211 per cent.
7. Of the mortgages held by the Corporation \$10,308,349.84 is on realty situate in Ontario, and \$11,246,274.48 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$2,625.00.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 36. Amount, \$58,766.89.
10. Aggregate market value of the land mortgaged to the Corporation, \$12,000,000, approximately.
11. How often are the securities held by the Corporation valued? Once a year and oftener if necessary.
12. (a) What officers of the Corporation are under bond and for what sum respectively? All officers and employees holding responsible positions give bonds or security satisfactory to the Corporation.
13. When were the accounts of the Corporation last audited? As at December 31, 1904.
14. Names and addresses of the auditors respectively for 1904-1905 (if appointed). For 1904 and 1905: Henry W. Barker, F.C.A., and A. E. O'Leary, O.C.A., Toronto.
15. What were the dividend days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January and 2nd July, 6 per cent. or 3 per cent. half yearly.
16. What is the day appointed for the Annual Meeting? 7th February, 1905.
17. Date of last Annual Meeting? 6th February, 1904.

THE CANADIAN SAVINGS AND LOAN COMPANY, OF LONDON, CANADA.

Head Office, London, Ontario.

Incorporated under the Building Societies Act (Consol. Stat. U.C., c. 53) by declaration filed with the Clerk of the Peace for the County of Middlesex on the 2nd September, 1875. (Decl. Book I. 67).

The lending and borrowing powers are governed by the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Canadian Savings and Loan Company, of London, Canada, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the law of the said Province.

The head office of the Corporation is at No. 420 Richmond Street, in the City of London, in the Province of Ontario.

The Board is constituted of five directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

John W. Jones, President,	London, Ont.,	10th February, 1904;	10th February, 1905.
John Christie, Vice-President,	"	"	"
A. T. McMahan, Vice-President,	"	"	"
Dr. F. R. Eccles, Director,	"	"	"
Robt. Fox, Director,	"	"	"
Malcolm H. Rowland, Manager,	"	"	"

A Permanent capital stock: Total amount authorized, unlimited; total amount subscribed, \$750,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.	—		
1. Fully paid	15,000	\$ 50	\$ 750,000	\$ 750,000	\$

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities of Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary capital fully called; Total called, \$750,000; total paid thereon	\$750,000 00	
5. (e) Unappropriated profits in respect of (1)	5,815 32	
6. (f) Reserve fund in respect of (1)	315,000 00	
		\$1,070,815 32
Liabilities to the Public.		
27. Deposits (including unclaimed deposits)	\$649,107 76	
28. Interest on deposits, due, or accrued or capitalized (included in 27).		
29. Debentures issued in Canada	681,768 98	
30. Interest due and accrued on (29)	8,838 12	
		1,339,714 86
Total liabilities		\$2,410,530 18

BALANCE SHEET—Continued.

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. 'a, Office premises situated as follows:—

2. 'b, At London, Ontario, held in freehold \$18,000 00 \$18,000 00

B.—Debts Secured by Mortgages of Land.

9. 'a, Debts (other than item 10) secured by mortgages of land 2,342,428 20

10. 'b, Debts secured by mortgaged land held for sale 3,200 00
2,345,628 20

C.—Debts not above enumerated for which the Corporation holds Securities as follows:—

14. 'b, Debts secured by Municipal Bonds or Debentures \$1,331 65
15. 'd, Debts secured by Loan Corporations' Debentures 1,016 60
20. 'b, Debts secured only by permanent stock or shares of the Corporation 9,540 25
22. 'j, Debts secured by other Loan Company's stock and by Life Insurance Policy 7,573 75
19,465 45

E.—Cash.

31. 'a, On hand \$4,911 02
32. 'b, In banks 22,525 51
27,436 53
Total \$2,410,530 18

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(Col. 4.)

2. (b) Cash not already shown under (1):—

(i) On hand \$ 790 56
3. (ii) In bank 1,797 09

C.—Receipts on Account of Investments, Loans or Debts.

(a) On mortgages of realty:—

10. (i) Principal 409,673 48
11. (ii) Interest }
(b) On other securities:— } 36,809 50
13. (ii) Interest or dividends }

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales 2,200 00
17. (b) Rents 640 00

E.—Miscellaneous.

19. (b) Premium or bonus on loans 2,033 56

F.—Borrowed Money.

26. (b) Borrowed by taking deposits 1,371,394 70
27. (c) Borrowed on debentures 272,017 60

G.—Receipts from other Sources.

30. (a) Town debenture 239 50
(b) Loan Company's stock 5,657 50
(c) Life Insurance 636 65
(d) Loan Company's debenture 60 00

Totals \$2,602,840 04

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	\$446,186 16
(b) Loaned or invested in other securities:—	
2. (i) Shareholders on their stock	8,045 00
(ii) Life insurance policy	6,479 16

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$45,000 00	45,000 00
--	-------------	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

12. (a) Bank account (principal and interest)	10,489 09
19. (b) Deposits: Principal, \$1,229,954.18; interest, \$18,433.20	1,248,387 38
20. (c) Debentures issued in Canada: Principal, \$172,320; interest, \$23,456.86	195,776 86

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	8,693 60
26. (b) Commission or brokerage	3,233 44
28. (d) Stationery, postage, printing and advertising	788 55
29. (e) Law costs	21 98
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	1,632 29
31. (g) Travelling expenses	677 25
32. (h) Registration fee	167 00
33. (j) Other management expenditure	584 68

E.—Other Expenditures, viz.:

34. (a) Repairs to office building	313 17
--	--------

F.—Balance.

37. (a) Cash on hand and in banks	27,436 63
Total	\$2,002,840 04

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$196,450.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$222,331.08.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.0712 per cent.; on debentures, 4.0063.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.2143 per cent, on other securities 5.5082 per cent.
7. Of the mortgages held by the Corporation, \$2,342,428.20 is on realty situate in Ontario and none on realty situate elsewhere.
8. Loans written off or transferred to real estate account in 1904, \$1,470.83.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 1, amount \$1,470.83.
10. Aggregate market value of the land mortgaged to the Corporation, \$4,464,275.00.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$5,000; teller, \$5,000; accountant, \$2,000; and ledger-keeper, \$2,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited, 23rd January, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905: For 1904, A. Ellis and C. B. Edwards B.A., London, Ont. For 1905, A. Ellis and C. B. Edwards, B.A., London, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? June 30th and December 31st. 6 per cent.
16. What is the date appointed for the Annual Meeting? 8th February, 1905.
17. Date of last Annual Meeting? 10th February, 1904.

THE CENTRAL CANADA LOAN AND SAVINGS COMPANY.

Head Office, Peterboro', Ontario.

CONSTATING INSTRUMENTS.

The former Provincial Company, incorporated 1884, 7th March, L. P. of Ont. (Lib. 16, No. 67).

1890, 53 V., c. 129 (O); fixes the capital stock at \$5,000,000 divided into 50,000 Shares of \$100 each (sec. 1), confirms the purchase of the assets of the Peterborough Real Estate Investment Co., Limited, (secs. 2-4): sanctions the issue of debenture stock, (secs. 5-12); authorizes agencies in United Kingdom, (13); defines the limit of borrowing powers.

1893, 8th June, Letters Patent of Ontario amending the foregoing Letters Patent.

1897, May 6th, Letters Patent of Ontario so amending the foregoing Letters Patent as to give the Company the status of a Loan Company (and not the status of a Loaning Land Company) under the Loan Corporations Act.

Dominion Company of same name incorporated by 61 V. c. 97 (D), assets of Provincial Company transferred to Dominion Company by 63 Vict. c. 130 (Ontario).

ANNUAL STATEMENT

Of the conditions and affairs of the Central Canada Loan and Savings Company at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 437 George street, in the Town of Peterborough, in the Province of Ontario.

The Board is constituted of thirteen directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 9th January, 1905, were as follows, together with their respective terms of office:

Hon. George A. Cox, Senator, President, Toronto, 9th Jan'y, 1905, 6th Jan'y, 1906.				
F. G. Cox, Vice-President, Toronto,	"	"	"	"
E. R. Wood, Vice-Pres. and Managing Director, Toronto,	"	"	"	"
Sir Thomas W. Taylor, Director, Toronto,	"	"	"	"
Richard Hall, Director, Peterboro',	"	"	"	"
Robert Jaffray, Director, Toronto,	"	"	"	"
Wm. Mackenzie, Director, Toronto,	"	"	"	"
Chester D. Massey, Director, Toronto,	"	"	"	"
J. J. Kenny, Director, Toronto,	"	"	"	"
Rev. John Potts, D.D., Director, Toronto,	"	"	"	"
Frederick C. Taylor, Director, Lindsay,	"	"	"	"
J. H. Housser, Director, Toronto,	"	"	"	"
E. W. Cox, Director, Toronto,	"	"	"	"
E. R. Wood, Managing Director, Toronto,	"	"	"	"
G. A. Morrow, Assistant Manager, Toronto,	"	"	"	"
W. S. Hodgins, Secretary, Toronto,	"	"	"	"

A. Permanent capital stock: Total amount authorized, \$5,000,000; total amount subscribed, \$2,500,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b.)—Fixed and permanent Capital Stock created by virtue of Joint Stock Companies' Acts or Private Acts.

Description.	No. of shares.	Par value.	Total amount held.	Total amount paid thereon.
		\$	\$	\$
1. Fully called	9,375	100	937,500	937,500
2. 20 per cent. called	15,625	100	1,562,500	312,500
Totals	25,000		2,500,000	1,250,000

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.		Capital and Liabilities.	
Capital (Liabilities to Stockholders or Shareholders).			
A.—Permanent Capital Stock or Shares.			
1. (a) Ordinary joint stock capital fully called; total called, \$937,500; total paid thereon		\$937,500 00	
2. (b) Ordinary joint stock capital 20 per cent called; total called, \$312,500; total paid thereon		312,500 00	
4. (d) Dividend declared in respect of (1) and (2) but not yet paid ..		43,750 00	
5. (e) Unappropriated profits in respect of (1) and (2)		25,855 18	
6. (f) Reserve fund in respect of (1) and (2)		800,000 00	
			\$2,119,605 18
Liabilities to the Public.			
27. Deposits, subject to notice		\$1,139,567 93	
29. Debentures issued in Canada		1,583,150 17	
30. Interest due and accrued on (29)		34,380 96	
31. Debentures issued elsewhere than in Canada		2,157,810 13	
32. Interest due and accrued on (31)		11,883 42	
			4,926,792 60
Total liabilities			\$7,046,397 78
Cr.		Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.			
A.—Immovable Property Owned Beneficially by Corporation.			
1. (a) Office premises situate as follows:—			
2. (i) At Toronto, and other real estate with rents due, held in freehold			\$140,219 88
B.—Debts secured by Mortgages of Land.			
9. (a) Debts (other than item 10) secured by mortgages of land		\$1,062,641 37	
11. (c) Interest due or accrued on item (9) not included therein		35,223 11	
			1,097,864 48
C.—Debts not above enumerated for which the Corporation holds securities as follows:			
22. (j) Debts secured by collateral security		\$1,903,431 55	
25. (n) Interest due or accrued on item (22) and not included therein ..		63,714 63	
			1,967,146 18
E.—Cash.			
31. (a) On hand		\$34,093 83	
32. (b) In banks			
In Canada	\$220,174 04		
In England, overdraft	\$4,893 27	215,280 77	
			249,374 60
F.—Assets not hereinbefore Mentioned.			
33. (b) Securities owned beneficially by Company		\$3,549,872 03	
Interest		41,901 61	
			3,591,773 64
Total assets			\$7,046,397 78

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.			
A.—Balance from 31st December, 1903.			
	(Col. 1.)	(Col. 4.)	
(b) Cash not already shown under (1):—			
1. (i) On hand		\$15,588 91	
3. (ii) In bank		169,099 97	
C.—Receipts on account of Investments, Loans or Debts.			
(a) On mortgages of realty:—			
10. (i) Principal		\$118,046 12	
11. (ii) Interest, including interest on loans on stock		136,733 67	
(iii) Insurance and taxes, etc., advanced by Company		9,472 00	
(b) On other securities, viz.: Bonds, stocks and debentures owned by Company.			
12. (i) Principal		1,273,128 10	
13. (ii) Interest or dividends with special profits on bonds and stocks ..		283,288 99	
(c) Loans secured by stocks, bonds and debentures:—			
14. (i) Principal		6,072,555 18	
15. (ii) Interest (included in item (11) part 2):—			
			7,893,224 06
Forward			\$8,077,912 94

CASH ACCOUNT.—RECEIPTS.—Continued.

Brought forward		\$8,077,912 94
D.—Receipts from Real Estate owned Beneficially by Corporation		
16. (a) Sales (not included in any of the foregoing items)	\$15,629 10	
17. (b) Rents	4,940 34	20,569 44
F.—Borrowed Money		
26. (b) Borrowed by taking deposits		5,465,488 21
27. (c) Borrowed on debentures		1,216,319 46
Totals		\$14,770,290 04

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		
1. (a) Loaned on mortgage of realty	(Col. 1.)	(Col. 4.)
(b) Loaned or invested in other securities:—		\$163,367 63
2. (i) On bonds, stocks and debentures		6,222,580 02
3. (ii) Purchase of bonds, stocks and debentures		1,211,621 84
6. (c) Real estate purchased		5,904 63
7. (e) Insurances or taxes advanced on property mortgaged to the Corporation		6,940 68
B.—Expended on Stock Account.		
8 Dividends paid on permanent stock		87,500 00
C.—Money borrowed (other than the foregoing) or interest thereon paid, viz: ..		
19. (b) Deposits: Principal, \$5,453,201.08; interest, \$32,083.66		5,485,284 74
20. (c) Debentures issued in Canada, \$950,716.79; interest, \$68,792.83		1,019,509 62
21. (d) Debentures issued elsewhere: Principal, \$170,931.90; interest, \$85,277.53		256,209 43
D.—Management Expenses (other than foregoing).		
25. (a) Salaries and fees and special tax	\$35,648 76	
26. (b) Commission or brokerage expenses on money borrowed or loaned	7,351 60	
28. (d) Stationery, postage, printing and advertising	6,582 84	
29. (e) Law costs	1,403 41	
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	6,365 24	
32. (h) Registration fee	255 00	
33. (i) Directors' compensation	4,390 00	61,996 85
F.—Balance.		
37. (a) Cash on hand and in bank		249,374 60
Totals		\$14,770,290 04

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$232,130.63.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, £94,827.10.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. No securities maturing in 1905 but stock loans amounting to \$1,903,431.55, subject to call.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, $3\frac{1}{4}$ per cent.: on debentures, sterling 3.99 per cent.; currency 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.025 per cent.; on other securities, fluctuates.
7. Of the mortgages held by the Corporation \$1,059,750.22 is on realty situate in Ontario, and \$2,891.15 is on realty situate elsewhere.
8. Loans written off or transferred to Real Estate Account during 1904, \$547.55.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, \$2,140,975.
11. How often are the securities held by the Corporation valued? Doubtful loans are watched closely, bonds and stocks, and loans on stocks watched daily.
12. (a) What officers of the Corporation are under bond, and for what sum respectively? All officers and clerks by Guarantee Company.
13. When were the accounts of the Corporation last audited? To 31st December, 1904, and running monthly audit during year.
14. Names and addresses of the auditors, respectively, for 1904 and 1905. For 1904: Walter Sterling, Toronto, Ont.. James A. Hall, Peterborough, Ont. For 1905: Walter Sterling, Toronto, and James A. Hall, Peterborough.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates were paid on those days respectively? 6 per cent quarterly, 1st January, April, July and October and 2 per cent. bonus making 8 per cent. paid for whole year.
16. What is the date appointed for the Annual Meeting? 9th January, 1905.
17. Date of last Annual Meeting? 7th January, 1904.

THE CHATHAM LOAN AND SAVINGS COMPANY.

Head Office, Chatham, Ontario.

Incorporated under the Building Societies' Act, R.S.O. 1877, c. 164, by declaration filed with the Clerk of the Peace for the County of Kent, 27th September, 1881.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Chatham Loan and Savings Company of Chatham, Ontario, at 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is on King street, in the City of Chatham, in the Province of Ontario.

The Board is constituted of seven directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office :

Archibald Bell, President, Chatham; 10th February, 1904; 8th February, 1905.		
Nathan H. Stevens, Vice-President, Chatham;	"	"
James Gardiner, Director, Chatham;	"	"
T. K. Holmes, M.D., Director, Chatham;	"	"
Hugh Malcolmson, Director, Chatham;	"	"
Wm. Ball, Director, Chatham;	"	"
J. E. Thomas, Director, Chatham;	"	"
S. F. Gardiner, Manager and Secretary, Chatham;	"	"

A. Permanent capital stock; total amount authorized \$1,000,000; total amount subscribed, \$367,300, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and Permanent capital stock created by virtue of the Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.	—		
1. Partly called	3,673	\$ 100	\$ 367,300	\$ c. 300,803 81	\$ c. 66,496 19

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary permanent capital; total paid thereon	\$300,803 81
4. (d) Dividends declared in respect of (1)	9,020 54
6. (f) Reserve fund in respect of (1)	39,400 00
7. (g) Contingent fund in respect of (1). Profit and loss	693 34

\$349,917 69

Liabilities to the Public.

27. Deposits (including unclaimed deposits) payable on demand, \$11,406.35; payable on notice, \$280,363.27	\$280,868 22
28. Interest on deposits, due or accrued or capitalized	10,401 40
29. Debentures issued in Canada	102,288 14
30. Interest due and accrued on (29)	3,418 61

397,476 37

Total liabilities

\$747,394 06

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situated as follows:—

2. (i) At the City of Chatham, held in freehold	\$10,900 00
---	-------------

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land....	\$705,309 78
10. (b) Debts secured by mortgaged land held for sale	20,412 30

725,722 08

C.—Debts not above enumerated for which the Corporation holds security as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	\$2,336 19
22. (j) Manufacturing Company's stock	2,936 15

5,272 34

E.—Cash.

31. (a) On hand	\$2,893 41
32. (b) In bank	2,389 93

5,283 34

F.—Assets not hereinbefore Mentioned.

27. (a) Office fixtures and furniture	216 30
---	--------

Total assets

\$747,394 06

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(b) Cash (not already shown under (1)) :—

2. (i) On hand	}	\$6,844 73
3. (ii) In bank		

B.—Sums received wholly or partly on Capital Stock.

4. (a) Paid on permanent capital	2,346 38
--	----------

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—

10. (i) Principal	78 852 82
11. (ii) Interest, \$38,101.03; extra interest, \$1,389.33	39,490 36

D.—Receipts from Real Estate owned Beneficially by Corporation.

17. (b) Rents	460 00
---------------------	--------

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	543,473 50
27. (c) Borrowed on debentures	56,472 11

G.—Receipts from other sources, viz.:

30. (a) Interest on bank account, exchange, etc.	483 60
---	--------

Totals

\$728,423 50

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Col. 4.)
1. (a) Loaned on mortgages of realty		\$53,628 50
2. (b) Loaned or invested in other securities:—		
(i) Manufacturing Company's stock		2,936 15

B.—Expended on Stock Account.

3. Dividends paid on permanent stock	\$8,966.73	8,966 73
--	------------	----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

18. (a) Bank account (principal and interest)		1,274 87
19. (b) Deposits: Principal, \$629,829.91; interest, \$10,901.40		\$60,731 31
20. (c) Debentures issued in Canada: Principal, \$8,155.23; interest, \$3,418.61		11,573 84

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees		2,784 16
26. (b) Commission or brokerage		42 35
27. (d) Stationery, postage, printing and advertising		319 22
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates		803 03
32. (h) Registration fees		80 00

F.—Balance.

37. (a) Cash on hand and in bank		5,283 34
Totals		\$728,423 50

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$54,461.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$60,126.60.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.36 per cent.; on debentures, 4 per cent.; on debenture stock, nil.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty 5.35 per cent.; on other securities, nil.
7. Of the mortgages held by the Corporation \$705,309.78 is on realty situate in Ontario; and nil on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, nil.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation during 1904. Number one, amount \$7,858.10.
10. Aggregate market value of the land mortgaged to the Corporation, \$1,482.950.
11. How often are the securities held by the Corporation valued? When loans are taken.
12. (a) What officers of the Corporation are under bond, and for what sum respectively? Manager, \$8,000; teller, \$3,000; ledger keeper, \$1,000. Manager by private sureties, teller and ledger keeper by Guarantee Company.
13. When were the accounts of the Corporation last audited? Completed January 26th, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905. For 1904: J. R. Gemmill and T. K. MacKeand, Chatham, Ont. For 1905, J. R. Gemmill and T. K. MacKeand, Chatham, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 30th June and 31st December, 6 per cent per annum.
16. What is the date appointed for the Annual Meeting? Second Wednesday in February in each year.
17. Date of last Annual Meeting? 10th February, 1904.

THE CREDIT FONCIER FRANCO-CANADIEN.

Head Office, 30 St. James St., Montreal.

As to the Paris Board of Management ("Paris Committee,") see 43 4 V. c. 60 (Q) secs. 30-35. 47 V. c. 62 (Q.), Sched. A., Art 51, enacts as follows: "The general meetings shall be held before the 31st of May in each year, either at the head office or at Paris in France, according as there may be more shares to order held and stock certificates to bearer deposited in the Province of Quebec or in France, thirty days before the meeting."

Chief agent for Ontario: William Edwin Long, Toronto.

CONSTATING INSTRUMENTS.

43-4 V. c. 60, Province of Quebec: An Act to incorporate the Company. Schedule A to the Act contains the original constitution and laws of the Company: See Act of Quebec (1884), 47 V. c. 52, *infra*.

44 V. c. 58, Dominion of Canada. Section 13 defines the Company's borrowing powers. (See also 62-63 Vic. c. 41 (D), s 20.)

44 V. c. 51, Province of Ontario, empowers the Company to establish branch offices in Ontario, to lend money, hold real estate in the Province, etc.

45 V. c. 84, Province of Quebec, amends 43-4 Vic. c. 60 (Q).

46 V. c. 85, Dominion of Canada, assimilates the powers of the Company to those of other Loan Companies.

47 V. c. 62, Province of Quebec. Schedule A to the Act contains the revised constitution and laws of the Company.

55-56 V. c. 29 (D. Criminal Code, 1892), by sec. 205 (6 d) exempts the Company from the general law prohibiting lotteries.

63 V. (1900) c. 74, Province of Quebec—An Act to amend the Charter of the Credit Foncier Franco-Canadien.

ANNUAL STATEMENT

Of the condition and affairs of the Credit Foncier Franco-Canadien (Loan Company) of Montreal, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 30 James Street, in the City of Montreal, in the Province of Quebec.

The chief agency for Ontario is situated at 73 Victoria Street, in the City of Toronto, in the Province of Ontario.

The chief agent and attorney for Ontario is Wm. Edwin Long, and his address is Toronto, in the Province of Ontario.

The Board is constituted of eleven directors holding office for three years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:—

George Brolemann, President, Paris, France;	May, 1904;	May, 1907
Hon. Mr. Justice Ouimet, Vice-President, Montreal;	May, 1903;	" 1906
J. E. Moret, Director, Paris, France,	Jan., 1904;	" 1907
Count J. de Camondo, Director, Paris, France;	May, 1904;	" 1907
A. Denfert Rochereau, Director, Paris;	May, 1902;	" 1905
G. de Molinari, Director, Paris, France	May, 1902;	" 1906
H. Laporte, Director, Montreal;	June, 1904;	" 1905
J. H. Thors, Director, Paris, France;	May, 1903;	" 1906
Hon. A. R. Angers, Director, Montreal;	Dec., 1904;	" 1907
E. Persillier Lachapelle, M.D., Montreal;	May, 1903;	" 1906
P. A. Cheramy, Paris, France;	Nov., 1904;	" 1905
M. Chevalier, Manager, Montreal.		
T. R. Nelson, Secretary, Montreal.		

A.—Permanent capital stock: Total amount authorized, \$4,784,689; total amount subscribed, \$4,784,689, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies' Act or Private Acts

Last call made: Date, January, 1905; Rate per cent. 12½.

Description.	No. of shares	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
2. 25 per cent. called.....	50,000	francs 500	\$ 4,784,689 00	\$ 1,196,172 25	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital, 25 per cent. called; total called, \$.....; total paid thereon	\$1,196,172 25
4. (d) Dividend declared in respect of (2), but not yet paid	2,372 44
5. (e) Unappropriated profits in respect of (2), (29), (31)	155,445 26
6. (f) Reserve fund in respect of (2), (29), (31)	100,677 74
7. (g) Contingent fund in respect of (2), (29), (31)	294,922 23
	\$1,750,589 92

Liabilities to the Public.

29. Debentures issued in Canada	\$76,104 98
30. Interest due and accrued on (29)	1,962 50
31. Debentures issued elsewhere than in Canada	7,719,484 26
32. Interest due and accrued on (31)	62,314 33
37. Owing to banks (including interest due or accrued)	496,478 43
39. Due on loans in process of completion or to pay assumed mortgages	166,757 69
40. Other liabilities to the public, viz.:	
42. (b) Due on debentures and coupons not yet presented	22,706 74
43. (c) Sundries	2,578 65
	8,548,387 58

Total Liabilities **\$10,298,977 50**

Cr. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation

1. (a) Office premises situate as follows:—	
2. (i) At Montreal, held in freehold	\$36,000 00
3. (ii) At Quebec	14,000 00
5. (b) Freehold land (including building) other than foregoing	62,751 76
	\$112,751 76

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$9,020,928 97
11. (c) Interest due or accrued on item 9 and not included therein..	100,799 39
	9,121,728 36

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Debts secured by Municipal Bonds or Debentures	\$147,582 74
15. (c) Debts secured by Public School Debentures	4,200 00
22. (j) Debts secured by debentures of incorporated companies	352,133 52
23. (k) Debts secured by seigniorial dues	88,215 02
24. (l) Debts secured by stock of incorporated companies	3,500 00
25. (m) Call loans	202,124 80
	797,756 08

E.—Cash.

31. (a) On hand	\$503 28
32. (b) In bank:	
In France	14,934 58
In Canada	227,367 80
	242,807 66

F.—Assets not hereinbefore Mentioned.

37. (a) Sundries	23,933 64
Total assets	\$10,298,977 50

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

For the Province of Ontario only.

A.—Balance from 31st December, 1903.			
(b) Cash not already shown under (1):			
3. On hand and in bank	(Col. 1.)	(Total Col. 4.)	
			\$14,150 81
C.—Receipts on account of Investments, Loans or Debts.			
(a) On mortgages of realty:—			
10. (i) Principal		\$76,388 45	
11. (ii) Interest		29,576 98	
(iii) Insurance, etc., advanced borrowers		1,674 39	
			107,639 82
D.—Receipts from Real Estate Owned Beneficially by the Corporation.			
16. (a) Sales (not included in any of the foregoing items)		\$4,250 00	
17. (b) Rents		130 00	
			4,380 00
E.—Miscellaneous.			
8. (a) Commission, brokerage, etc.	}		367 48
9 (b) Premium or bonus on loans			
G.—Receipts from other sources.			
30. (a) Received from Head Office			140,000 00
Total			\$266,538 11

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

For the Province of Ontario only.

1.—Expended on Corporation Account.			
A.—Sums Loaned or Invested on Capital Account.			
(Col. 1.) (Total Col. 4.)			
1. (a) Loaned on mortgages of realty		\$137,538 98	
(b) Loaned or invested in other securities, viz.:			
2. (i) Short Date Loan		100,000 00	
(a) Insurances or taxes advanced on property mortgaged to the Corporation		1,522 47	
			\$239,061 45
D.—Management Expenses (other than foregoing).			
25. (a) Salaries, wages and fees		\$3,141 15	
26. (b) Commission or brokerage		642 00	
28. (d) Stationery, postage, printing and advertising		246 21	
29. (e) Law costs		37 77	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates		551 40	
31. (g) Travelling expenses		101 21	
32. (h) Registration fees		250 00	
33. (i) Ontario tax		337 35	
			5,307 09
E.—Other Expenditure, viz.:			
34. (a) Taxes and repairs on property			24 33
F.—Balance.			
37. (b) Cash on hand and in banks			22,145 24
Total			\$266,538 11

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, no deposits; on debentures, about 4 per cent.; on debenture stock—
6. Average rate of interest per annum received by Corporation during 1904. On mortgages of realty, about 5 per cent.; on other securities, same.
7. Of the mortgages held by the Corporation \$593,297.32 is on realty situate in Ontario, and \$8,427,631.65 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. In Ontario. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. In Ontario. None.
10. Aggregate market value of the land mortgaged to the Corporation. About \$18,000,000.
11. How often are the securities held by the Corporation valued? At no regular periods.
12. (a) What officers of the Corporation are under bond and for what sum respectively? General Manager to the extent of 100 shares of the Company's stock, and the directors to the extent of 50 shares each.
13. When were the accounts of the Corporation last audited? February, 1905.
14. Names and addresses of the auditors for 1904. Hon. A. Desjardins and J. O. Gravel, Montreal, Que. For 1905: Hon. A. Desjardins and J. O. Gravel, Montreal, Que.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 1st June, 1904, at the rate of fcs. 8 per share of fcs. 125 paid up on fcs. 500 shares.
16. What is the date appointed for the Annual Meeting? Between the 20th and 31st of May.
17. Date of last Annual Meeting? 20th May, 1904.

CROWN SAVINGS AND LOAN COMPANY.

Head Office, Petrolia, Ontario.

Incorporated under the Building Societies Act, R.S.O., 1877, c. 164, by declaration filed with the Clerk of the Peace for the County of Lambton, 30th January, 1882.

The lending and borrowing powers of the Company are now governed by the Loan Corporations Act, R.S.O., 1897, c. 205; cf. R.S.O., 1877, c. 164, and R.S.O., 1887, c. 169.

ANNUAL STATEMENT

Of the conditions and affairs of the Crown Savings and Loan Company of Petrolia at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at the Town of Petrolia in the Province of Ontario.

The Board is constituted of nine directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

J. H. Fairbank, President, Petrolia;	4th February, 1904, 9th February, 1905.
J. L. Englehart, Vice-President, Petrolia;	" "
Frank Smith, Director, Sarnia;	" "
Frank Ward, Director, Wyoming;	" "
N. Ramsberry, Director, Osborne;	" "
Wm. Neil, Director, Bunyan;	" "
Hugh Park, Director, Alvinston;	" "
Robt. Jackson, Director, Pretolia;	" "
Jas. Joyce, Director, Petrolia;	19th December, 1905
Wm. English, Manager, Petrolia;	" "

A.—Permanent capital stock; total amount authorized, \$1,000,000; total amount subscribed, \$200,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual pay- ments thereon.	Total amount unpaid and con- stituting an asset of the Cor- poration.
	No. of shares.	Par value.	—		
1. Fully called	4,000	\$ 50	\$ 200,000	\$ 198,400	\$ 1,600

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders and Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$200,000;		
total paid thereon	\$198,400 00	
4. (e) Unappropriated profits	1,091 24	
6. (f) Reserve fund in respect of (1)	43,000 00	
		\$242,491 24

Liabilities to the Public.

27. Deposits	\$120,443 16	
29. Debentures issued in Canada	103,350 00	
30. Interest due or accrued on (29)	1,813 50	
		225,606 66
Total liabilities		\$468,097 90

Cr. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$442,909 78	\$442,909 78
--	--------------	--------------

C.—Debts not above enumerated for which the Corporation holds Securities as follows:

18. Debts secured by municipal bonds or debentures	24,672 46	24,672 46
--	-----------	-----------

E.—Cash.

32. (b) In bank		515 66
Total assets		\$468,097 90

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

C.—Receipts on account of Investments, Loans or Debts.

	(Col. 1.)	(Col. 3.)	(Col. 4.)
(a) On mortgages of realty:—			
10. (i) Principal		\$30,973 10	
11. (ii) Interest	\$15,823 68		
(b) Other securities, municipal debentures:—			
12. (i) Principal		5 513 70	
13. (ii) Interest	893 32		

F.—Borrowed Money.

26. (b) Borrowed by taking deposits		45,734 95	
27. (c) Borrowed on debentures		47,009 86	
Totals	\$16,717 00	\$129,331 61	\$146,048 61

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

Expended on Corporation Account.			
A.—Sums Loaned or Invested on Capital Account.			
	(Col. 1.)	(Col. 3.)	(Col. 4.)
1. (a) Loaned on mortgages or realty		\$51,294 45	
(b) Loaned or invested in other securities:—			
2. (i) Municipal debentures		10,414 00	
B.—Expended on Stock Account.			
8. Dividends paid on permanent stock	\$9,920 00		
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:			
18. (a) Bank account (principal and interest)		21,116 75	
19. (b) Deposits: Principal, \$34,040.73; interest, \$3,558.81	3,558 81	34,040 73	
20. (c) Debentures issued in Canada: Principal, \$9,331.54; interest, \$3,809.86	3,809 86	9,331 54	
D.—Management Expenses (other than foregoing).			
25. (a) Salaries and fees	1,825 15		
26. (b) Commission or brokerage			
27. (c) Advances to agents			
29. (e) Law costs			
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates			
32. (h) Registration fee			
E.—Other Expenditure.			
33. (a) General interest	221,66		
F.—Balance.			
37. (b) Cash in bank		515 66	
Totals	\$19,335 48	\$126,713 13	\$146,048 61

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. \$15,350.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.38 per cent; on debentures, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.16 per cent.; on other securities, 4.5 per cent.
7. Of the mortgages held by the Corporation \$442,909.78 is on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation. Estimated \$950,000.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: M. Fowler and S. McCann, Petrolia. For 1905: J. M. Fowler and A. McQuien, Petrolia.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd July, 1904, 2½ per cent. 2nd January, 1905, 2½ per cent.
16. What is the date appointed for the Annual Meeting? 9th February, 1905.
17. Date of last Annual Meeting? 9th February, 1905.

THE DOMINION SAVINGS AND INVESTMENT SOCIETY.

Head Office, London, Ontario.

Incorporated under chapter 53 of the Consolidated Statutes of Upper Canada as a Permanent Building Society, by declaration filed with the Clerk of the Peace for the County of Middlesex, 20th April, 1872.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O. 1897, c. 205; cf. Consol. Stat. U.C. c. 53; R.S.O. 1877, c. 164; and R.S.O. 1887, c. 169.

ANNUAL STATEMENT

Of the condition and affairs of the Dominion Savings and Investment Society of London, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 371 Richmond street, in the City of London, in the Province of Ontario.

The Board is constituted of eight directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Thomas H. Purdom, K.C., President, London, Ont.; 14th Feb., 1905, 14th Feb. 1906.		
John Ferguson, Vice-President, London, Ont.,	"	"
W. J. McMurtry, Director, Toronto, Ont.,	"	"
Rev. J. H. Starr, Director, Toronto, Ont.,	"	"
Wm. Bettridge, M.B., Director, Strathroy, Ont.,	"	"
John Purdom, Director, London, Ont.,	"	"
Francis Love, P.M., Director, London, Ont.,	"	"
Samuel Wright, Director, London, Ont.,	"	"
Nathaniel Mills, Manager, London, Ont.,	"	"

A.—Permanent capital stock: Total amount authorized, \$1,500,000; total amount subscribed, \$1,000,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a).—Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
Fully called	20,000	\$ c. 50 00	\$ c. 1,000,000 00	\$ c. 931,584 00	\$ c. 65,416 00

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$....;		
total paid thereon	\$934,250 00	
2. (b) Ordinary joint stock capital, per cent. called; total called,		
\$....; total paid thereon	334 00	
4. (d) Dividends declared in respect of (1) and (2), but not yet paid	18,685 00	
6. (f) Reserve fund in respect of (1), (2)	70,000 00	
7. (g) Contingent fund in respect of (1), (2)	18,524 65	
		\$1,041,793 65

Liabilities to the Public.

27. Deposits	\$795,073 82	
28. Interest on deposits, due or accrued or capitalised (included in		
No. 27):		
29. Debentures issued in Canada	93,082 00	
30. Interest accrued on 29	1,821 38	
31. Debentures issued elsewhere than in Canada	246,546 24	
32. Interest accrued on (31)	1,232 34	
		1,137,755 78
Total liabilities		\$2,179,549 43

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$1,939,471 64	
10. (b) Debts secured by mortgaged land held for sale	118,827 56	
		\$2,058,299 20

C.—Debts not above enumerated for which the Corporation holds Securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation		70,283 23
--	--	-----------

E.—Cash.

31. (a) On hand	\$3,083 72	
32. (b) In banks	46,883 28	
		49,967 00

F.—Assets not hereinbefore Mentioned.

37. (a) Office fittings		1,000 00
Total assets		\$2,179,549 43

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

		(Col. 1.) (Total Col. 4.)
(a) Cash (not already shown under (1)) :—		
2. (i) On hand	\$1,176 69	
3. (ii) In banks	36,051 19	
		\$37,227 88

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—		
10. (i) Principal	\$228,588 46	
11. (ii) Interest	112,347 24	
(b) On other securities :—		
13. (i) Principal	254 03	
(ii) Interest or dividends	2,790 98	
		343,980 71

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	979,537 35	
27. (c) Borrowed on debentures	84,745 32	
		1,064,282 67
Totals		\$1,445,491 26

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		
1. (a) Loaned on mortgages of realty	(Col. 1.) \$250,505 83	(Total Col. 4.) \$250,505 83
B.—Expended on Stock Account.		
8. Dividends paid on permanent stock	37,370 00	37,370 00
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:		
19. (b) Deposits: Principal, \$984,901.84; interest, \$26,392.29		1,011,294 13
20. (c) Debentures issued in Canada: Principal, \$52,095; interest, \$2,969.49		55,064 49
31. (d) Debentures issued elsewhere: Principal, \$20,926.67; interest, \$9,923.85		30,850 52
D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	\$6,735 30	
26. (b) Commission or brokerage	638 77	
28. (d) Stationery, postage, printing and advertising	842 92	
29. (e) Law costs	84 05	
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	1,218 73	
31. (g) Travelling expenses	67 15	
32. (h) Registration fee	150 00	
E.—Other Expenditures, viz.:		
34. (a) Telegrams and telephone	120 95	
35. (b) Sundries	591 42	
		10,439 29
F.—Balance.		
37. (a) Cash on hand and in bank		49,967 00
Totals		\$1,445,491 26

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$29,600.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, \$93,196.65.
3. Amount of other existing obligations of the corporation which will mature in 1905. Exclusive of deposits, none.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$185,641.25.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.524 per cent.; on debentures, 3.989 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.13.
7. Of the mortgages held by the Corporation \$2,058,299.20 is on realty situate in Ontario, and none on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904: No. 6, amount, \$6,476.96.
10. Aggregate market value of the land mortgaged to the Corporation, \$3,163,294.02.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$10,000; Accountant, \$5,000; Teller, \$5,000. All executed by Guarantee Companies except Accountant, whose bond is executed by private individuals.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). for 1904, John Lohead and A. McPherson, London, Ont.; for 1905, John Lohead and A. McPherson, London, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 1st January and 1st July, at rate of 4 per cent.
16. What is the date appointed for the Annual Meeting? Second Tuesday in February of each year.
17. Date of last Annual Meeting? 9th February, 1904.

DYMENT SECURITIES, LOAN AND SAVINGS COMPANY.

Head Office, Barrie, Ontario.

CONSTATING INSTRUMENTS.

Incorporated on 15th May, by Special Act of the Dominion of Canada, 2 Edward VII, c. 60.

ANNUAL STATEMENT

Of the condition and affairs of the Dymment Securities Loan and Savings Company, of Barrie, Ont., at 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 93 Dunlop Street, in the Town of Barrie, in the Province of Ontario.

The Board is constituted of five directors holding office for the term of one year.

The directors and chief executive officers of the Corporation at 31st December, 1904, were as follows, together with their respective terms of office.

N. Dymment, President, Barrie, Ont.,	8th February, 1904, 6th February, 1905.
A. E. Dymment, Vice-President, Thessalon,	" "
A. E. H. Creswicke, Director, Barrie,	" "
T. W. Baker, Director, London,	" "
S. Dymment, Director, Barrie,	" "
S. Dymment, Manager-Secretary, Barrie,	" "

A.—Permanent capital stock; total amount authorized \$2,000,000; total amount subscribed, \$650,600, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(b) Fixed and Permanent Capital Stock created by virtue of Private Act.

Description	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining uncalled.
1. Fully called and paid.....	6,506	\$ 100	\$ 650,600	\$ 650,600	\$

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$650,600;	
total paid thereon	\$650,600 00
4. (d) Dividend declared in respect of (1), not yet paid	16,265 00
5. (e) Unappropriated profits in respect of (1)	10,997 72
	<u>\$677,862 72</u>

Liabilities to the Public.

27. Deposits	\$93,250 96
37. Owing to banks (including interest due and accrued)	54,095 67
	<u>147,346 63</u>
Total liabilities	<u>\$825,209 35</u>

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 16) secured by mortgages of land	\$197,043 81
--	--------------

C.—Debts not above enumerated for which the Corporation holds Securities as follows:

19. (g) Debts secured by stocks and bonds of other companies	627,617 19
--	------------

E.—Cash.

31. (a) On hand	548 35
Total assets	<u>\$825,209 35</u>

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(i) On hand	(Col. 4.) \$1,257 24
-------------	-------------------------

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on joint stock permanent capital	200 00
---	--------

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—

10. (i) Principal	17,233 60
11. (ii) Interest	10,338 98
(b) On other securities:—	
12. (i) Principal	54,710 00
13. (ii) Interest	22,728 83

F.—Borrowed Money.

25. (a) Bank or other advances, discounts or overdraft	54,095 67
26. (b) Borrowed by taking deposits	82,903 84

G.—Receipts from other sources.

30. (b) Overpaid by solicitors	4 00
Totals	<u>\$243,472 16</u>

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	(Col. 4.) \$40,464 95
(b) Loaned or invested on other securities	41,538 16

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	32,523 70
--	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.: .

18. (a) Bank account (principal and interest)	45,377 40
19. (b) Deposits: Principal, \$80,377.09; interest, \$775.70	81,152 79

D.—Management Expenses (other than foregoing).

25. (a) Salaries and fees	1,022 41
30. (f) Fuel, rent and taxes (other than in 7 and 32) and rates	73 11
31. (g) Travelling expenses	243 14
32. (h) Registration fees and Government taxes	528 15

F.—Balance.

37. (a) Cash on hand	548 35
Totals	\$243,472 16

MISCELLANEOUS STATEMENT FOR THE YEAR, ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 6 per cent.; on other securities $5\frac{1}{2}$ per cent.
7. Of the mortgages held by the Corporation \$197,043.81 is on realty situate in Ontario, and nothing on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the lands mortgaged to the Corporation. \$504,450.
11. How often are the securities held by the corporation valued. No stated period.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$5,000 by private sureties.
13. When were the accounts of the Corporation last audited? 4th February, 1904, and 2nd February, 1905.
14. Names and addresses of the auditors for 1904 and 1905. For 1904: C. E. Hewson, and W. R. King, Barrie. For 1905: C. E. Hewson and W. R. King, Barrie.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 30th June and 31st December. 5 per cent.
16. What is the date appointed for the Annual Meeting? 5th February, 1905.
17. Date of last Annual Meeting? 8th February, 1904.

EAST LAMBTON FARMERS' LOAN AND SAVINGS COMPANY.

Head Office, Forest, Ontario. (Company's By-Law No. 29.)

Incorporated under the Building Societies Act, R.S.O., 1887, c. 169, by declaration filed with the Clerk of the Peace for the County of Lambton, 19th December, 1891.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O. 1897, c. 205; cf. R.S.O. 1887, c. 169.

ANNUAL STATEMENT

Of the condition and affairs of the East Lambton Farmers' Loan and Savings Company of Forest, Ontario, at 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 74 south side King Street, in the Town of Forest, in the Province of Ontario.

The Board is constituted of eight directors holding office for two years.

The directors and chief executive officers of the Corporation at the 31st of December, 1904, were as follows, together with their respective terms of office:

James Hutton, M.D., President, Forest,	28th February, 1905,	28th February, 1907
John Shaw, Vice-President, Forest,	"	"
P. Cairns, Director, Forest,	"	"
Wm. Nimmo, Director, Ravenswood,	"	"
Geo. Smith, Director, Arkona,	28th February, 1904,	28th February, 1906
R. J. McCormick, Director, Warwick,	"	"
D. P. Campbell, Director, Thedford,	"	"
Thos. Sutcliffe, Director, Forest,	"	"
N. Tripp, Manager-Secretary, Forest.		

A.—Permanent capital stock: Total amount authorized, \$500,000; total amount subscribed, \$170,000 as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Societies Act.

Description.	Total amount issued and outstanding at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.			
1. Fully called.....	3,400	\$ 50	170,000	\$ 169,846 65	\$ c. 153 35

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.		Capital and Liabilities.	
Capital (Liabilities to Stockholders or Shareholders).			
A.—Permanent Capital Stock or Shares.			
1. (a) Ordinary joint stock capital fully called: Total called, \$170,000;			
total paid thereon	\$169,846 65		
4. (d) Dividends declared in respect of (1), but not yet paid	4,670 78		
6. (f) Reserve fund in respect of (1)	20,175 00		
			\$194,692 43
Liabilities to the Public.			
27. Deposits payable on notice	\$180,203 28		
29. Debentures issued in Canada	7,500 00		
30. Interest due and accrued	112 55		
			187,815 83
Total liabilities			\$382,508 26
Cr.		Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.			
A.—Immovable Property owned Beneficially by the Corporation.			
1. (a) Office premises situate as follows:—			
2. (i) At Forest, Ont., held in freehold	\$2,500 00		
6. (b) Freehold land (including buildings) other than foregoing	825 00		
			\$3,325 00
B.—Debts secured by Mortgages of Land.			
9. (a) Debts (other than item 10) secured by mortgages of land	\$328,138 89		
11. (c) Interest due and accrued on item (9) and not included therein	14,952 61		
			343,091 50
C.—Debts not above enumerated for which the Corporation holds securities as follows:			
14. (b) Debts secured by municipal bonds or debentures	\$26,531 78		
20. (h) Debts secured only by permanent stock or shares of the Corporation	1,660 00		
26. (n) Interest due and accrued on items (14) and (20) and not included therein	997 07		
			29,128 85
E.—Cash.			
31. (a) On hand	\$1,189 74		
32. (b) In bank	5,516 98		
			6,706 72
F.—Assets not hereinbefore Mentioned.			
40. (d) Office furniture			256 19
Total assets			\$382,508 26

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.			
Balance from 31st December, 1903.			
	(Col. 1.)	(Col. 4.)	
(b) Cash (not already shown under (i)) :—			
2. (i) On hand	\$1,594 86		
3. (ii) In bank	12,266 21		
			\$13,861 07
B.—Sums received wholly or partly on Capital Stock.			
4. (a) Calls on joint stock permanent capital	\$100 00		100 00
C.—Receipts on Account of Investments, Loans or Debts.			
(a) On mortgages of realty :—			
10. (i) Principal	\$23,668 77		
11. (ii) Interest	15,312 89		
(b) On other securities :—			
12. (i) Principal, municipal debentures	1,267 21		
(ii) Principal, loans on stock	8,310 00		
(c) Unsecured debts :—			
15. (ii) Interest on bank deposits	174 14		
			48,733 01
D.—Receipts from Real Estate owned Beneficially by the Corporation.			
17. Rents	\$58 50		58 50
F.—Borrowed Money.			
26. (b) Borrowed by taking deposits	\$138,312 83		
27. (c) Borrowed on debentures	2,700 00		
			141,012 83
Total			\$203,765 41

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.			
1. (a) Loaned on mortgages of realty	(Col. 1.)	(Col. 4.)	
(b) Loaned on other securities:—	\$45,790 80		
2. (i) On stock	1,600 00		
3. (ii) On municipal debentures	3,754 79		
B.—Expended on Stock Account.			\$51,145 59
3. Dividends paid on permanent stock	\$9,319 18		9,319 18
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:			
19. (b) Deposits: Principal, \$128,022.97; interest, \$5,907.40	133,929 87		
20. (c) Debentures issued in Canada: Principal, \$1,000.00; interest, \$228.67	1,228 67		
24. (g) Interest on bank overdraft	14 15		
D.—Management Expenses (other than foregoing).			135,172 69
25. (a) Salaries and fees	\$1,019 00		
26. (b) Commission or brokerage	42 66		
28. (d) Stationery, postage, printing and advertising	42 35		
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	216 47		
32. (h) Registration fees	55 60		
33. (i) Other management expenditure	35 30		
Other Expenditure, viz.:			1,370 78
35. (b) Repairs to building	\$72 60		72 60
F.—Balance.			
37. (a) Cash on hand and in banks			6,684 57
Totals			\$203,765 41

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. \$2,500.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations to the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$23,110.00.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, $3\frac{1}{4}$ per cent., on debentures, 3.93 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty 5.11 per cent. On other securities, 5 per cent.
7. Of the mortgages held by the Corporation all are on realty situate in Ontario.
8. Loans written off or transferred to real estate during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, \$639,900.00.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager. \$5,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? December 31st, 1904.
14. Names and addresses of the auditors for 1904 and 1905. For 1904: H. Barron and Geo. E. Monroe, Forest, Ont. For 1905: H. Barron and Geo. E. Monroe, Forest, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 1st January and 1st July, at the rate of $5\frac{1}{4}$ per cent.
16. What is the date appointed for the Annual Meeting? The last Saturday in January each year.
17. Date of last Annual Meeting? 28th January, 1905.

THE GREY AND BRUCE LOAN COMPANY.

(Formerly the Owen Sound, Grey and Bruce Loan and Savings Company).

Head Office, Owen Sound, Ontario.

Incorporated under the Building Societies Act, R.S.O., 1887, c. 169, as a permanent Building Society under the name of the Owen Sound, Grey and Bruce Loan and Savings Company, by declaration filed with the Clerk of the Peace for the County of Grey, 10th May, 1889.

The Corporate name was by Order in Council of Ontario, 15th September, 1897, changed to The Grey and Bruce Loan Company.

The lending and borrowing powers of the Company are governed by the Loan Corporations Act, R.S.O., 1897, c. 205; cf. R.S.O., 1887, c. 169.

ANNUAL STATEMENT

Of the condition and affairs of The Grey and Bruce Loan Company, of Owen Sound, Ont., at the 31st of December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is on the Corner of Union and Scrope Streets, Town of Owen Sound, in the Province of Ontario.

The Board is constituted of eleven directors, holding office for one year.

The directors and chief executive officers of the Corporation as at 31st December, 1904, were as follows, together with their respective term of office:

S. J. Parker, President, Owen Sound;	3rd February, 1904;	1st February, 1905
R. McKnight, Vice-President, Owen Sound;	"	"
W. H. Taylor, Director, Owen Sound;	"	"
Robert Wightman, Director, Owen Sound;	"	"
James Gardner, Director, Meaford;	"	"
Robert Thomson, Director, Owen Sound;	"	"
Judge Morrison, Director, Owen Sound;	"	"
John McDonald, Director, Chatsworth;	"	"
Wm. Thomson, Director, Tara;	"	"
John Armstrong, Director, Owen Sound;	"	"
Geo. S. Kilbourn, Director, Owen Sound;	"	"
Wm. P. Telford, Managing Secretary, Owen Sound.		

A.—Permanent capital stock: total amount authorized, \$500,000; total amount subscribed, \$500,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Societies Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.			
1. Fully called.....	4,000	\$ 50	\$ 200,000	\$ 200,000	
2. Partly called.....	6,000	50	300,000	60,000	
Totals.....	10,000		500,000	260,000	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called: Total called, \$200,000; total paid thereon	\$200,000 00	
2. (b) Ordinary joint stock capital, 20 per cent. called; total called, \$50,000.00; total paid thereon	60,000 00	
4. (d) Dividends declared in respect of (1), and (2), but not yet paid	7,150 00	
5. (e) Unappropriated profits in respect of (1) and (2)	133 05	
6. (f) Reserve fund in respect of (1) and (2)	12,700 00	
7. (g) Contingent fund in respect of (1) and (2)	2,296 37	
		\$282,279 42

Liabilities to the Public.

27. Deposits: Payable on demand, \$57,472.09; payable on notice, \$5,663.88	\$63,135 97	
28. Interest on deposits due, or accrued or capitalized	192 76	
29. Debentures in Canada	161,405 00	
30. Interest due and accrued on (29)	2,427 40	
		227,161 13
Total liabilities		\$509,440 55

Cr. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:—		
(1) At Owen Sound, held in freehold	\$4,417 72	
7. (d) Rent accrued (not due)	16 66	
		\$4,434 38

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$491,591 86	
11. (c) Interest due and accrued on item (9), not included therein	10,816 97	
		502,408 83

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	\$1,155 00	
26. (n) Interest due and accrued on item (20) and not included therein	31 76	
		1,186 76

E.—Cash.

31. (a) On hand	\$559 34	
32. (b) In bank	851 24	
		1,410 58
Total assets		\$509,440 55

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(Total Col. 4.)

(b) Cash (not already shown under (1)):		
2. (i) On hand	\$	96 86

B.—Sums received wholly or partly on Capital Stock.

9. Transfer fees		17 09
------------------	--	-------

C.—Receipts on Account of Investments, Loans or Debts.

(a) On mortgages of realty:—		
10. (i) Principal and insurance premiums		50,384 30
11. (ii) Interest		26,745 36
(b) On other securities:—		
12. (i) Principal		2,347 05
13. (ii) Interest or dividends and interest on deposits in bank		80 55

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rent of part of offices premises		318 33
--	--	--------

F.—Borrowed Money.

26. (b) Borrowed by taking deposits		99,123 72
27. (c) Borrowed on debentures		13,753 00

Totals		\$192,866 26
--------	--	--------------

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.	
A.—Sums Loaned or Invested on Capital Account.	
1. (a) Loaned on mortgages of realty	\$43,467 60
(b) Loaned or invested in other securities, viz.:—	
2. (i) On Company's stock	2,310 00
7. (e) Insurance and taxes advanced on property mortgaged to the Corporation ..	334 40
B.—Expended on Stock Account.	
8. Dividends paid on permanent stock	14,300 00
C.—Borrowed Money (other than foregoing) or Interest thereon paid, viz.:	
18. (a) Bank account (principal and interest)	7,733 71
19. (b) Deposits: Principal, \$94,972.28; interest, \$2,100.06	97,072 34
20. (c) Debentures payable in Canada: Principal, \$17,070; interest, \$6,828.22	23,898 22
D.—Management Expenses (other than foregoing).	
25. (a) Salaries and fees	1,412 00
28. (d) Stationery, postage, printing and advertising, etc.	89 10
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	660 68
32. (h) Registration fees	82 00
E.—Other Expenditure.	
33. (a) Repairs to office buildings	95 63
F.—Balance.	
37. (a) Cash on hand and in bank	1,410 58
Totals	\$192,866 26

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$49,475.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905, \$3,375.72.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$56,865.00.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, $3\frac{1}{2}$ per cent; on debentures, 4 to $4\frac{1}{2}$ per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, $5\frac{1}{2}$ per cent.; on other securities, $5\frac{1}{2}$ per cent.
7. Of the mortgages held by the Corporation all are on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation. Estimated at \$1,000,000.
11. How often are the securities held by the Corporation valued? At time loan is made.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$10,000; Solicitor, \$4,000. By private sureties.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905. For 1904: C. A. Fleming and A. F. Armstrong, Owen Sound. For 1905: C. A. Fleming and A. F. Armstrong.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 30th June and 31st December. Rate $5\frac{1}{2}$ per cent. yearly.
16. What is the date appointed for the Annual Meeting? First Wednesday in February.
17. Date of last Annual Meeting? 3rd February, 1904.

THE GUELPH AND ONTARIO INVESTMENT AND SAVINGS SOCIETY.

Head Office, Guelph, Ontario.

Incorporated under the Building Societies' Act (Consol. Statutes U.C. chap. 53), by declaration filed with the Clerk of the Peace for the County of Wellington, 19th January, 1876.

The lending and the borrowing powers are governed by the Loan Corporations Act, R. S. O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The Guelph and Ontario Investment and Savings Society, of Guelph, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is on corner of Cork and Wyndham streets, in the City of Guelph, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Alexander Baine Petrie, President, Guelph; February, 1904; February, 1905.

Robert Melvin, Vice-President, Guelph; " "

David Stirton, Director, Guelph; " "

H. Howitt, M.D., Director, Guelph; " "

John M. Bond, Director, Guelph; " "

Charles E. Howitt, Director, Guelph; " "

G. D. Forbes, Director, Hespeler; " "

J. E. McElderry, Manager-Secretary, Guelph; " "

A.—Permanent capital stock: Total amount authorized, \$1,000,000; total amount subscribed \$820,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.	—		
		\$	\$	\$	\$
1. Fully called.....	7,000	50	350,000	350,000	
2. Partly ".....	9,100	50	470,000	91,000	379,000
Totals.....	16,100		820,000	441,000	379,000

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$350,000; total paid thereon.....	\$350,000 00
2. (b) Ordinary joint stock capital, 20 per cent called; total called, \$94,000; total paid thereon.....	94,000 00
4. (d) Dividends declared in respect of (1) and (2), but not yet paid.....	17,760 00
5. (e) Unappropriated profits in respect of (1) and (2).....	6,160 29
6. (f) Reserve fund in respect of (1) and (2).....	187,000 00

Forward.....

\$654,920 29

Dr.

BALANCE SHEET.—Continued.

Brought forward		\$654,920 29
Liabilities to the Public.		
27. Deposits payable on demand*	\$686,300 24	
28. Interest on deposits, \$10,131.67, capitalised during year, (included in 27):		
29. Debentures issued in Canada	588 241 80	
30. Interest due and accrued on (29)	9,868 80	
		1,284,610 84
Total liabilities		\$1,939,531 13**

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property Owned Beneficially by the Corporation.		
1. (a) Office premises at Guelph, Ont. (held in freehold)		\$21,000 00
B.—Debts secured by Mortgages of Land.		
9. (a) Debts (other than item 10) secured by mortgages of land		1,717,485 62
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
14. (b) Municipal bonds or debentures owned by Society	\$80,030 29	
15. (c) Public School debentures owned by Society	4,739 50	
16. (d) Debts secured by Loan Corporations debentures	2,300 00	
20. (h) Debts secured only by permanent stock or shares of the Corporation	3,454 75	
26. (n) Interest due or accrued on items (14 to (20) and not included therein	620 27	
		91,444 81
E.—Cash.		
31. (a) On hand	\$6,895 40	
32. (b) In bank, Guelph	104,605 30	
		110,900 70
Total assets		\$1,939,531 13
Assets reported in 1903 but written off in 1904 (not extended) 8946.27.		

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.			
A.—Balance from 31st December, 1903.			
2.	(i) On hand	(Col. 1.)	(Total Col. 4.)
	(ii) In bank	\$1,419 70	
		46,774 22	\$48,193 92
C.—Receipts on account of Investments, Loans or Debts.			
(a) On mortgages of realty:—			
11.	(ii) Interest	408,649 95	
10.	(i) Principal		
(b) On other securities:—			
12.	(i) Principal	3,756 95	
13.	(ii) Interest or dividends	3,721 78	
			416,128 68
D.—Receipts from Real Estate Owned Beneficially by Corporation.			
16. (a) Sales not included in any of the foregoing items	\$200 00		
17. (b) Rent of office building	335 77		
			535 77
F.—Borrowed Money.			
26. (b) Borrowed by taking deposits (including interest capitalized).	\$989,233 09		
27. (c) Borrowed on debentures	346,310 45		
			1,335,543 54
G.—Receipts from other sources, viz.:			
30. (a) Interest on bank deposit	\$3,690 12		
(b) Exchange, collection charges, etc.	525 22		
			4,215 34
Totals			\$1,804,617 25

*Note.—Deposits of \$50 and under payable on demand. Over that amount subject to notice if required.

**Directors' and Auditors' fees for 1904 payable February, 1905, not included.

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty	\$287,712 46	
(b) Loaned or invested in other securities:—		
2. (i) On loan corporation's debentures	3,160 00	
3. (ii) On loan corporation's stocks	150 00	
		\$291,022 46

E.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$35,520 00	35,520 00
--	-------------	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits: Principal, \$984,588.17; interest, \$20,552.56	1,005,140 73	
20. (c) Debentures issued in Canada: Principal, \$326,289.39; interest, \$19,649.68	345,939 07	1,351,079 80

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$10,244 24
26. (b) Commission and land valuation	2,475 89
28. (d) Stationery, postage, printing and advertising	1,034 07
29. (e) Law costs	55 00
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	1,159 16
31. (g) Travelling expenses	452 60
32. (h) Registration fees, etc	140 00
33. (i) Other management expenditure	217 85

E.—Other Expenditure, viz.:

34. (a) Insurance and guarantees	184 20
35. (b) Repairs	131 28
	16,094 29

F.—Balance.

37. (a) Cash on hand and in banks	110,900 70
Totals	\$1,804,617 25

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, (including overdue Debentures), \$193,023.09.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905, None, other than deposits.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905 (including those payable on demand) \$377,005.16.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 2.85 per cent. on debentures, 3.66 per cent.; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 5.48 per cent.; on other securities, 3.60 per cent.
7. Of the mortgages held by the Corporation \$1,360,619.76 is on realty situate in Ontario, and \$356,865.86 elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$946.27.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904 number, 1; amount \$1,738.48.
10. Aggregate market value of the land mortgaged to the Corporation, \$3,366,468.00.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$10,000; other officers, \$10,000; also six firms of Solicitors. By Guarantee Company and private sureties.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904: J. W. Kilgour, Guelph, and J. M. Scully, F.C.A., Waterloo. For 1905: J. W. Kilgour, Guelph; J. M. Scully, F.C.A., Waterloo.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January and 2nd July. Rate 8 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 15th February, 1905.
17. Date of last Annual Meeting? 17th February, 1904.

THE HAMILTON PROVIDENT AND LOAN SOCIETY.

Head Office, Hamilton, Ont.

CONSTATING INSTRUMENTS.

1871. Declaration of Incorporation under Building Societies' Act (Consol. Stat. U. C., c. 53) filed with the Clerk of the Peace for the County of Wentworth, 6th June, 1871.
 1885. Special Act, 48-9 V. c. 30 (D), confirming Provincial incorporation, limiting share capital and the amount to be borrowed by way of deposits, debentures, etc.
 1893. Special Act, 56 V. c. (D), limiting total liabilities of Society (sec. 2), and extending its operations (sec. 3).
 1895. Special Act, 58-9 V. c. 85 (D), repealed sec. 6 of 56 V. c. 85 (D), and provided for the registration and cancellation of debenture stock.

ANNUAL STATEMENT

Of the condition and affairs of the Hamilton Provident and Loan Society of Hamilton, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 46 King Street East in the City of Hamilton, in the Province of Ontario.

The Board is constituted of six directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows—all are elected at annual meeting first Monday in March each year:

Alexander Turner, President, Hamilton.
 George Rutherford, Vice-President, Hamilton.
 Hon. Wm. Gibson, Director, Beamsville.
 J. T. Glasco, Director, Hamilton.
 Judge Snider, Director, Hamilton.
 Geo. Hope, Director, "
 C. Ferrie, Manager and Secretary, Hamilton.

A. Permanent capital stock: Total amount authorized, \$3,000,000; total amount subscribed, \$1,500,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent capital stock created by virtue of Building Society Acts.

Description	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Parvalue of shares.	—		
		\$	\$	\$	\$
1. Fully called	10,000	100	1,000,000	1,000,000	.....
2. Partly "	5,000	100	500,000	100,000	400,000
Totals	15,000	.....	1,500,000	1,100,000	400,000

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

- (a) Ordinary joint stock capital, fully called; total called, \$1,000,000; total paid thereon \$1,000,000 00
- (b) Ordinary joint stock capital, 20 per cent. called; total called, \$100,000; total paid thereon 100,000 00

BALANCE SHEET.—Continued.

4. (d) Dividends declared in respect of (1), (2), but not yet paid....	33,000 00	
6. (f) Reserve fund in respect of (1), (2)	415,000 00	
7. (g) Contingent fund in respect of (1), (2)	14,547 73	
		\$1,562,547 73
Liabilities to the Public.		
27. Deposits payable on notice	\$688,261 54	
28. Interests on deposits, due, accrued or capitalised	\$19,651 32	
29. Debentures issued in Canada	547,391 36	
30. Interest due and accrued on (29)	8,289 56	
31. Debentures issued elsewhere than in Canada	436,734 44	
32. Interest due and accrued on (31)	2,730 56	
35. Debenture stock issued elsewhere than in Canada	423,400 00	
36. Interest due and accrued on (35)	2,502 66	
39. Due on loans in process of completion or to pay assumed mortgages	2,151 03	
		2,134,461 15
Total liabilities		\$3,697,008 88

Cr.	Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property Owned Beneficially by Corporation.		
1. (a) Office premises situate as follows:—		
2. (i) At Hamilton, Ont., held in freehold	\$80,600 00	
3. (ii) At Brandon, Man., held in freehold	6,000 00	
		\$86,600 00
B.—Debts secured by Mortgages of Land.		
9. (a) Debts (other than item 10) secured by mortgages of land	\$3,315,368 65	
10. (b) Debts secured by mortgaged land held for sale	37,260 00	
		3,352,628 65
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
14. (b) Debts secured by municipal bonds or debentures	\$76,409 90	
15. (c) Debts secured by public school debentures	1,044 35	
20. (h) Debts secured only by permanent stock or shares of the Corporation	1,469 25	
22. (j) Debts secured by Life Assurance Coy. stock	2,278 80	
23. (k) Loans on chartered bank and Loan Co. stock	4,199 60	
		85,401 90
E.—Cash.		
31. (a) On hand	\$7,277 59	
32. (b) In bank	165,700 74	
		172,978 33
Total assets		\$3,697,008 88

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.		
A.—Balances from 31st December, 1903.		
		(Total Col. 4.)
(b) Cash (not already shown under (1)) :—		
2. (i) On hand	\$5,728 98	
3. (ii) In bank	147,100 63	
C.—Receipts on Account of Investments, Loans or Debts.		
(a) On mortgages of realty:—		
10. (i) Principal	476,648 37	
11. (ii) Interest	191,348 42	
(b) On debentures:—		
12. (i) Principal	4,204 94	
13. (ii) Interest	3,043 36	
15. (iii) Interest received from banks, etc.	6,256 41	
D.—Receipts from Real Estate Owned Beneficially by Corporation.		
17. (b) Rents, head office building	3,407 06	
F.—Borrowed Money.		
26. (b) Borrowed by taking deposits	448,901 12	
27. (c) Borrowed on debentures	136,925 51	
28. (d) Borrowed on debenture stock	48,666 67	
G.—Receipts from other sources, viz.:		
30. (c) Sundry accounts	38,175 21	
Totals		\$1,510,406 66

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	(Total Col. 4.)
(b) Loaned or invested in other securities, viz.:—	\$453,705 38
3. (ii) Chartered Bank and Loan Coy. stock	3,800 00
5. (iv) Debentures	9,283 93

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	66,000 00
--	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits: Principal: \$499,311.54; interest, \$994.14	500,305 68
20. (c) Debentures issued in Canada: Principal, \$108,375.00; interest, \$26,866.80	129,241 80
21. (d) Debentures issued elsewhere: Principal, \$15,573.33; interest, \$17,980.64	33,553 97
23. (f) Debenture stock issued elsewhere: Principal, \$48,666.67; interest, \$15,595.84	64,262 51
24. (g) General interest	1,235 06

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees, \$9,605.76; directors' fees, \$3,500	13,105 76
26. (b) Commission or brokerage	3,583 03
28. (d) Stationery, postage, printing and advertising	1,303 18
29. (e) Law costs	89 00
30. (f) Taxes on capital and income	1,149 00
31. (g) Travelling expenses, inspection of land and Inspector's salaries	4,643 42
32. (h) Registration fees	210 00
Bank of Scotland, London Branch	136 53

E.—Other Expenditures, viz.:

34. (a) Manitoba Branch expenses	4,789 44
35. (b) Loss on property sold	2,472 24
36. (c) Debenture expenses	1,300 17
37. (d) Sundry accounts	43,258 23

F.—Balance.

37. (a) Cash on hand and in banks	172,978 33
Totals	\$1,510,406 68

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of Debentures of the Corporation in Canada which will mature in 1905, \$173,489.85.
2. Amount of Debentures of the Corporation elsewhere which will mature in 1905. \$81,127.33.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, about \$335,989.00.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 2.94 per cent.; on debentures 3.90 per cent.; on debenture stock, 4 per cent.
6. (a) Average rate of interest per annum received by the Corporation on investments made during 1904 on mortgages of realty, 6.55 per cent. On other securities, 4 per cent.
(b) Average rate of interest per annum received by the Corporation on all mortgage investments outstanding at 31st December, 1904, 6.04 per cent.
7. Of the mortgages held by the Corporation \$2,320,227.60 is on realty situate in Ontario, and \$1,117,802.95 is on realty situate elsewhere.

-
8. Loans written off or transferred to real estate account during 1904, \$3,636.24.
 9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken in 1904. Number, 3; Amount, \$4,889.40.
 10. Aggregate market value of the land mortgaged to the Corporation, \$7,848,279.00.
 11. How often are the securities held by the Corporation valued? Yearly or oftener.
 12. (a) What officers of the Corporation are under bond and for what sum respectively? All from \$5,000 down. By guarantee companies and private sureties.
 13. When were the accounts of the Corporation last audited? 31st December, 1904; audited monthly.
 14. Names and addresses of the auditors, 1904: W. F. Findlay, F. C. A., Maitland Young, Hamilton, and H. L. Adolph, Brandon, Man. For 1905, not yet appointed.
 15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January and 2nd July—6 per cent. per annum.
 16. What is the date appointed for the Annual Meeting? First Monday in March each year.
 17. Date of last Annual Meeting? 7th March 1904.
-

HOME SAVINGS AND LOAN COMPANY, LIMITED.

Head Office, Toronto, Ont.

CONSTATING INSTRUMENTS.

1877, April 25. Incorporated by Letters Patent under the Ontario Joint Stock Companies Letters Patent Act (R. S. O., 1877, c. 150). Lib. 5, No. 35.

1879. 42 V. c. 55 (D.) empowered the Company to acquire the property and assets of the Toronto Savings Bank.

For the lending and the borrowing powers see the Letters Patent above cited, and the Loan Corporations Act, R. S. O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Home Savings and Loan Company, Limited, of Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 78 Church Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of five directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:—

Eugene O'Keefe, President, Toronto, 18th February, 1904, 16th February, 1905.

*John Foy, Vice-President, " " " "

Thomas Flynn, Director, " " " "

Edward Stock, " Mimico, " " "

James Mason, Managing Director, Toronto, " " "

A. Permanent capital stock; total amount authorized, \$2,500,000; total amount subscribed, \$2,000,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and Permanent Capital Stock created by virtue of Joint Stock Companies Act or Private Acts.

Only one call made 10 per cent. Stock allotted at different times, last call 5th February, 1894.

Description.	No. of shares.	Par value of shares.	Total amount held	Total amount paid thereon.	Total remaining unpaid calls.
		\$	\$ c.	\$ c.	\$ c.
2. 10 per cent called	20,000	100	2,000,000 00	200,000 00	nil.

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital, 10 per cent. called; total called, \$200,000; total paid thereon	\$200,000 00
4. (d) Dividends declared in respect of (2), but not yet paid	7,000 00
5. (e) Unappropriated profits in respect of (2)	17,727 83
6. (f) Reserve fund in respect of (2)	200,000 00
7. (g) Contingent fund in respect of (2)	55,000 00
	\$479,727 83

*Deceased. Succeeded by Hon. James J. Foy, K.C., M.P.P.

BALANCE SHEET.—Continued.

Liabilities to the Public.

27. Deposits (including unclaimed deposits), payable on notice	\$3,260,867 40	
28. Interest on deposits, due or accrued or capitalized	89,489 40	
		3,350,356 80
Total liabilities		\$3,830,084 63

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:—

2. (i) At Toronto, held in freehold	\$12,000 00	
5. (b) Freehold land (including buildings) other than foregoing	1,100 08	
		\$13,100 08

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$399,728 26	
10. (b) Debts secured by mortgaged land held for sale	16,590 86	
11. (c) Interest due or accrued on items (9) and (10) and not included therein	6,751 22	
		423,070 34

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	\$12,885 23	
22. (j) Debts secured on the collateral security of stocks, bonds and debentures other than the above	2,954,418 67	
26. (n) Interest due or accrued on items (20) to (24) and not included therein	9,641 98	
		2,976,945 88

D.—Unsecured Debts.

27. (a) Preliminary expenses, Branch A.		1,971 73
--	--	----------

E.—Cash.

31. (a) On hand	\$8,689 13	
32. (b) In bank at Toronto	201,272 31	
		209,961 44

F.—Assets not hereinbefore Mentioned.

37. (a) Office furniture	\$1,950 00	
38. (b) Debentures of the Niagara Navigation Company	98,160 00	
39. (c) Montreal Light, Heat and Power Company	56,625 00	
Lachine Power Sinking Fund Bonds		
40. (d) New York Central and Hudson River Railway Gold Bonds	24,000 00	
41. (e) Baltimore and Ohio Railroad Company Gold Bonds	23,070 16	
42. (f) Chicago, Burlington and Quincy Railroad Mortgage Bonds	7,230 00	
		205,035 16
Total assets		\$3,830,084 63

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

	(Col. 1.)	(Col. 4.)
(b) Cash (not already shown under (1)) :—		
2. (i) On hand	\$3,917 54	
3. (ii) In bank	189,851 42	
		\$193,768 96

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—		
10. (i) Principal and rents	\$153,592 66	
11. (ii) Interest	21,154 81	
		174,747 47
(b) On other securities :—		
12. (i) Principal	\$3,560,098 69	
13. (ii) Interest or dividends	115,242 65	
		3,675,341 34

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rents		460 00
---------------------	--	--------

CASH ACCOUNT.—Continued.

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	\$4,713,986 74	4,713,986 74
---	----------------	--------------

G.—Receipts from other sources, viz.:

30. (a) Insurance premiums and solicitors' charges refunded by mortgagors		604 37
Totals		\$8,758,908 88

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	(Col. 1.) \$52,700 31	(Col. 4.) \$52,700 31
(b) Loaned or invested in other securities, viz.:		
1. (i) On collateral security of stocks, bonds and debentures	4,239,244 29	4,239,244 29

B.—Expended on Stock Account.

8. Dividends paid on capital stock	14,000 00	14,000 00
--	-----------	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits: Principal, \$4,144,360.45; interest, \$4,834.43	4,149,194 88	4,149,194 88
---	--------------	--------------

D.—Management Expense (other than foregoing).

25. (a) Salaries, wages and fees (including directors' and auditors' fees, 2 years, \$5,000)	25,586 62	
26. (b) Commission or brokerage	13 26	
28. (d) Stationery, postage, printing and advertising	7,452 34	
29. (e) Law costs	7 25	
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	1,203 71	
32. (h) Registration fees	210 00	
33. (i) Other management expenditure	1,710 11	
		36,183 19

E.—Other Expenditure.

34. (a) New York Central and Hudson River Railway Gold Bonds....	\$24,000 00	
35. (b) Baltimore and Ohio Railroad Company Gold Bonds	23,070 16	
36. (c) Chicago, Burlington and Quincy Railroad Mortgage Bonds ..	7,230 00	
Improvements to office building	602 88	
Safe, furniture and fittings at Branch A., Queen St. West, Toronto	750 00	
Branch A. preliminary expenses	1,971 73	
		57,624 77

F.—Balance.

37. (a) Cash on hand and in banks		209,961 44
Totals		\$8,758,908 88

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, nil.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, nil.
3. Amount of other existing obligations of the Corporation which will mature in 1905. All deposits which are all subject to notice.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. Mortgages, \$11,483.00, and all loans on collaterals.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposit $3\frac{1}{2}$ per cent.; on debentures, nil, on debenture stock, nil.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5 per cent., on other securities, about 5 per cent.
7. Of the mortgages held by the Corporation, all are on realty situate in Ontario.
8. Loans written off during 1904, \$1,662.16.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, \$841,300.00.

11. How often are the securities held by the Corporation valued. Mortgages when occasion requires, other loans continuously.
12. (a) What officers of the Corporation are under bond, and for what sum respectively? All under bond, Managing Director, \$8,000; Assistant Manager, \$4,000; Accountant, \$4,000; Teller, \$5,000; two Ledger Keepers, each \$4,000; two Clerks, each, \$3,000; Clerk, \$2,000; Messenger, \$2,000; Manager Branch A. \$5,000; Teller, do., \$3,000; Ledger Keeper, do., \$3,000. All bonds executed by a Guarantee Company except the teller, whose bonds are \$3,000 by Guarantee Company and \$2,000 private sureties.
13. Date when the accounts of the Corporation were last audited? Audited daily and completed at end of the year.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: J. M. Sullivan and J. G. Hall, Toronto; for 1905: J. M. Sullivan and J. G. Hall, Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on these days respectively? 2nd January and 2nd July 1904, at rate of 7 per cent. per annum for each half year.
16. What is the date appointed for the Annual Meeting? 16th February, 1905.
17. Date of last Annual Meeting? 18th February, 1904.

THE HURON AND ERIE LOAN AND SAVINGS COMPANY.

Head Office, London Ontario.

CONSTATING INSTRUMENTS.

1864. Declaration of incorporation under the Building Societies Act (Consol. Stat. U. C. c. 53) filed with the Clerk of the Peace for the County of Middlesex, 18th March, 1864. The original corporate name was The Huron and Erie Savings and Loan Society.

1876. The corporate name was changed to The Huron and Erie Loan and Savings Company by the Act of Ontario, 39 Vic. c. 95.

1896. The Dominion Act, 59 V. c. 49, limited the borrowing powers; regulated the issue, transfer and registration of debentures; prohibited loans on stock or to directors, etc. See Statutes of Canada, 1899, 62-3 Vic. c. 115.

ANNUAL STATEMENT

Of the condition and affairs of the Huron and Erie Loan and Savings Company, of London, Ontario, at 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 442 Richmond Street, in the City of London, in the Province of Ontario.

The Board is constituted of six directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

John W. Little, President, London, Ont.;	February, 1905;	February, 1906.
V. Cronyn, Vice-President,	"	"
Prof. Wm. Saunders, Director, Ottawa, Ont.;	"	"
F. E. Leonard, Director, London, Ont.;	"	"
Judge Talbot McBeth, Director, London, Ont.	"	"
John Labatt, Director,	"	"
Geo. A. Somerville, Manager and Secretary, London, Ont.	"	"

A. Permanent capital stock: Total amount authorized, \$3,000,000; total amount subscribed, \$3,000,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Act—

Description.	Total amount issued and subsisting at 31st December, 1904.		Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value.		
		\$	\$	\$
1. Fully called	20,000	50	1,000,000	1,000,000
2. 20 per cent called	40,000	50	2,000,000	400,000
Totals	60,000		3,000,000	1,400,000
				1,600,000

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$1,000,000; total paid thereon	\$1,000,000 00	
2. (b) Ordinary joint stock capital, 20 per cent. called; total called, \$400,000; total paid thereon	400,000 00	
4. (d) Dividend declared in respect of (1), (2), but not yet paid	63,187 83	
5. (e) Unappropriated profits in respect of (1), (2)	29,600 67	
6. (f) Reserve fund in respect of (1), (2)	1,000,000 00	
		\$2,492,788 50

Liabilities to the Public.

27. Deposits payable on notice	\$1,659,163 2	
28. Interest on deposits capitalized or paid in 1904, \$49,895.47		
29. Debentures payable in Canada	2,588,763 26	
30. Interest due and accrued on (29)	42,065 56	
31. Debentures payable elsewhere than in Canada	1,499,295 83	
32. Interest due and accrued on (31)	9,263 52	
		5,798,552 17
Total liabilities		\$8,291,340 62

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation

1. (a) Office premises situate as follows:—		
2. (i) At 442 Richmond Street, London, Ont., held in freehold	\$15,000 00	\$15,000 00

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land, less amount retained to pay prior mortgages, \$65,281.24	7,301,844 66	
10. (b) Debts secured by mortgaged land held for sale	2,804 00	
		7,304,644 66

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Municipal bonds or debentures owned by Company	\$269,589 11	
15. (c) Public School debentures owned by Company	22,616 81	
22. (j) Bonds of other Corporations owned by Company	79,196 37	
23. (k) Debts secured by Life Insurance Policies	4,919 00	
24. (l) Debts secured by bank stocks	16,781 00	
		393,102 29

E.—Cash.

31. (a) 'On hand	\$5,543 38	
32. (b) In bank as follows:—		
33. (i) In England	50,233 87	
34. (ii) In Canada	333,291 42	
		389,068 67

F.—Assets not hereinbefore Mentioned.

37. (a) Permanent stock of other Corporations fully paid up		189,525 00
Total assets		\$8,291,340 62

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

	(Col. 1.)	(Col. 4.)
(a) Cash (not already shown under (1)): —		
2. (i) On hand	\$2,981 91	
3. (ii) In bank	312,782 53	
		\$315,764 44

CASH ACCOUNT.—Continued.

C.—Receipts on account of Investments, Loans or Debts.			
10.	(a) On mortgages of realty:—		
	(i) Principal	\$1,171,587 12	
11.	(ii) Interest	388,065 15	
	(b) On other securities:—		
12.	(i) Principal	50,545 12	
13.	(ii) Interest or dividends	15,774 58	
	(c) Unsecured debts: Retained to pay assumed mortgages	46,286 24	
			1,672,258 21
D.—Receipts from Real Estate Owned Beneficially by Corporation.			
17.	(b) Rents	575 00	575 00
F.—Borrowed Money.			
26.	(b) Borrowed by taking deposits	\$3,027,461 95	
27.	(c) Borrowed on debentures	1,501,637 28	
			4,529,099 23
G.—Receipts from other sources, viz.:			
30.	(a) Interest on bank deposits	\$6,596 79	6,596 79
	Totals		\$6,524,293 67

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.			
A.—Sums Loaned or Invested on Capital Account.			
		(Col. 1.)	(Col. 4.)
1.	(a) Loaned on mortgages of realty (including assumed mortgages \$25,540.00)	\$1,322,333 59	
	(b) Loaned or invested in other securities:—		
2.	(i) Loans on Life Insurance Policies	880 93	
3.	(ii) Loans on bonds, stocks, etc.	60,500 00	
4.	(iii) Debentures purchased	10,553 42	
			\$1,394,267 94
B.—Expended on Stock Account.			
8.	Dividends paid on permanent stock	\$125,853 75	125,853 75
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:			
19.	(b) Deposits: Principal: \$3,043,228.82; interest, \$1,091.03	3,044,319 85	
20.	(c) Debentures in Canada: Principal, \$1,127,122.27; interest, \$94,030.96	1,221,153 23	
21.	(d) Debentures elsewhere: Principal, \$239,318.35; interest, \$54,581.74	293,900 09	
			4,559,373 17
D.—Management Expenses (other than foregoing).			
25.	(a) Salaries, wages and fees	\$27,618 06	
26.	(b) Commission or brokerage	14,275 98	
28.	(d) Stationery, postage, printing and advertising	3,863 80	
29.	(e) Law costs	1,831 37	
30.	(f) Fuel, rent, taxes (other than in 7 and 32) and rates	3,242 30	
31.	(g) Travelling expenses	4,009 41	
32.	(h) Registration fees	255 00	
33.	(i) Other management expenditure	914 22	
			55,730 14
F.—Balance.			
37.	(a) Cash on hand and in banks		389,068 67
	Totals		\$6,524,293 67

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation payable in Canada which will mature in 1905. (Including \$34,132.35 overdue and not presented for payment), \$896,573.46.
2. Amount of debentures issued by the Corporation payable elsewhere which will mature in 1905. \$453,412.73.

3. Amount of other existing obligations of the Corporation which will mature in 1905 (exclusive of deposits). None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$1,197,507.82.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3 per cent.; on debentures, 3.896; on debenture stock, none.
Average rate of interest on mortgages outstanding at 31st December, 1904, 5.197 per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 5.268 per cent.; on other securities 3.962 per cent.
7. Of the mortgages held by the Corporation, \$7,296,908.90, is on realty situate in Ontario, and \$70,217.00, is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$8,978.32.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. Number 7; amount, \$9,743.90.
10. Aggregate market value of the land mortgaged to the Corporation, \$14,689,070.00.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$10,000, and other officers, \$56,000; \$66,000 in all.
(b) By Guarantee Company.
13. When were the accounts of the Corporation last audited? As at 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905: For 1904 Geo. F. Jewell, F.C.A., and Alfred A. Booker, both of London, Ont. For 1905: Geo. F. Jewell, F.C.A., and Alfred Booker, both of London, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January, 1904,—4½ per cent., 2nd July, 1904,—4½ per cent.
16. What is the date appointed for the Annual Meeting? 14th February, 1906.
17. Date of last Annual Meeting? 8th February, 1905.

THE HURON AND LAMBTON LOAN AND SAVINGS COMPANY.

Head Office, Sarnia.

Incorporated under the Building Societies Act, R. S. O. 1877, c. 164, By Declaration filed with the Clerk of the Peace for the County of Lambton, 1st November, 1877. The lending and borrowing powers are governed by the Loan Corporations Act, R.S. O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Huron and Lambton Loan and Savings Company, of Sarnia, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 154 Front street, in the Town of Sarnia, in the Province of Ontario.

The Board is constituted of six directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

F. F. Pardee, President, Sarnia;	3rd February, 1904,	3rd February, 1905.
David Milne, Vice-President, Sarnia,	"	"
Frank Ward, Director, Wyoming	"	"
Manfred B. Proctor, Director, Sarnia,	"	"
Malcolm Mackenzie, Director, Sarnia,	"	"
Jno. A. McBean, Director, Brigden,	"	"
W. A. Smart, Secretary, Sarnia,	"	"

A. Permanent capital stock; total amount authorized; \$1,000,000; total amount subscribed, \$399,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
		\$	\$	\$ c.	\$
1. Fully called	7,234	50	361,700	361,700 00	.....
2. —per cent. called	409	50	20,450	5,146 08	.....
3. 20 per cent. called	337	50	16,850	4,150 00	.....
Total	7,980		399,000	370,996 08	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$378,550;	
paid thereon	\$365,850 00
2. (b) Ordinary joint stock capital, per cent. called; total called,	
total paid thereon	5,146 08
6. (f) Reserve fund in respect of (1), (2)	64,000 00
7. (g) Contingent fund in respect of (1), (2)	1,803 01

\$436,799 09

BALANCE SHEET.—Continued.

Liabilities to the Public.

27. Deposits	\$272,112 61	
28. Interest on deposits due or accrued or capitalized	8,698 92	
29. Debentures issued in Canada	90,898 00	
30. Interest due or accrued on (29)	1,297 18	
		373,006 71
Total liabilities		\$809,805 80

Cr.	Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property Owned Beneficially by Corporation.		
1. (a) Office premises situate as follows:—		
2. (i) At Sarnia, Ontario, held in freehold	\$7,000 00	
5. (b) Freehold land (including buildings) other than foregoing	8,918 95	\$15,918 95
B.—Debts secured by Mortgages of Land.		
9. (b) Debts (other than item 10) secured by mortgages of land	\$724,398 70	724,398 70
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
14. (b) Debts secured by municipal bonds or debentures	37,382 02	
20. (b) Debts secured only by permanent stock or shares of the Corporation	27,283 85	64,665 87
E.—Cash.		
31. (a) On hand	\$1,459 81	
32. (b) In bank	3,362 47	4,822 28
Total assets		\$809,805 80

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.		
A.—Balance from 31st December, 1903.		
(b) Cash (not already shown under (1)) :—		
2.	(i) On hand	\$795 75
3.	(ii) In bank	80 58
B.—Sums received wholly or partly on Capital Stock.		
4. (a)	Calls on joint stock permanent capital	33,488 33
5. (b)	Premiums on (4)	5,180 00
C.—Receipts on account of Investments, Loans or Debts.		
(a) On mortgages of realty :—		
10.	(i) Principal	} 161,034 27
11.	(ii) Interest	
F.—Borrowed Money.		
26. (b)	Borrowed by taking deposits	350,294 62
27. (c)	Borrowed on debentures	29,698 00
G.—Receipts from other sources, viz. :		
30. (b)	General interest	291 56
Totals		\$580,863 11

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		
1. (a) Loaned on mortgages of realty		\$149,238 48

CASH ACCOUNT.—Continued.

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	21,318 35
--	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. Deposits: Principal, \$366,525.27; interest, \$8,698.92	375,224 19
20. (c) Debentures issued in Canada: Principal, \$22,980.00; interest, \$3,208.66	26,188 66

D.—Management Expenses (other than foregoing).

25. (a) Salaries and fees	2,696 00
26. (b) Commission or brokerage	25 00
28. (d) Stationery, postage, printing and advertising	301 77
29. (e) Law costs	17 00
30. (f) Fuel, rent, taxes (other than in 7 and 32)	675 49
31. (g) Travelling expenses	18 40
32. (h) Registration and filing fees	80 00
33. (i) Other management expenditure	65 93

E.—Other Expenditure, viz.:

34. (a) Repairs to office buildings	148 21
36. (c) General interest	53 35

F.—Balance.

37. (a) Cash on hand and in bank	4,822 28
Totals	\$580,863 11

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$38,880.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. Estimate, \$150,000.00.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3.08 per cent.; on debentures, 3.82 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.20 per cent.; on other securities, 4.10.
7. Of the mortgages held by the Corporation, \$624,474.65 is on realty situate in Ontario and \$99,924.05 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account in 1904, \$999.14.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. Number 4, Amount, \$13,329.00.
10. Aggregate market value of the land mortgaged to the Corporation, \$1,400,000.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$10,000; Accountant, \$5,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? Audited weekly.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904, J. D. Stewart and Henry Ingram, Sarnia, Ont. For 1905, J. D. Stewart and Henry Ingram, Sarnia, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January and 2nd July, 1904. Rate 6 per cent. per annum.
16. What is the date appointed for the Annual Meeting? First Tuesday in February.
17. Date of last Annual Meeting? 2nd February, 1904.

THE IMPERIAL LOAN AND INVESTMENT COMPANY OF CANADA.

Head Office, Toronto. (38 Vic. c. 62 (D) s. 2).

CONSTATING INSTRUMENTS.

As recited in the Preamble of 38 Vic. 62 (D), the Company was incorporated under the Building Societies Act, Consol. Stat. U. C. chap. 53. The declaration of incorporation was filed on the 19th August, 1869, with the Clerk of the Peace for the County of York. The corporate name was The Imperial Building, Savings and Investment Company (Decl. Book II, 47).

In 1875 the corporate name was changed by 38 V. c. 62 (D) to The Imperial Loan and Investment Company (sec. 1). The existing Corporation was continued under the new name, with its head office at Toronto, (sec. 2).

Section 3 enacts: "3. The said Company shall not under its new name be deemed a new corporation, but it shall have, hold and continue to exercise all the rights, powers and privileges that previously to such change had been held, exercised and enjoyed by the said 'Imperial Building, Savings and Investment Company' in as full and ample a manner as if the said Company had continued to exist under its original name; and all statutory provisions applicable to the said company shall continue applicable to the said Imperial Loan and Investment Company.

In 1881, by Letters Patent of Canada, dated 11th June, the Company was reincorporated "under The Canada Joint Stock Companies Act, 1876, by the name of the Imperial Loan and Investment Company of Canada (Limited) and as a loan company within the meaning and provisions of the said last mentioned Act, with their now existing capital of one million dollars."

For the lending and the borrowing powers see R. S. C. (1886), c. 119, secs. 88-98; and the Loan Corporations Act, R. S. O. 1897, c. 205.

See Statutes of Canada, 1899, 62-3 Vic. c. 116.

ANNUAL STATEMENT

Of the conditions and affairs of the Imperial Loan and Investment Company of Canada, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 32-34 Adelaide Street E., in the City of Toronto, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at 31st December, 1904, were as follows, together with their respective terms of office:

John H. Tilden, President, Hamilton, Ont.,	July, 1904; February, 1905.
Judge F. M. Morson, Vice-President, Toronto, Ont.,	February, 1904; February, 1905.
D. A. Burns, Director, Toronto, Ont.,	" "
Thomas T. Rolph, Director, Toronto Ont.,	" "
W. M. Douglas, K. C., Director, Toronto Ont.,	" "
E. H. Kertland, Director, Hamilton, Ont.,	" "
Ed. L. Taylor, Director, Winnipeg,	" "
Thos. T. Rolph, Secretary, Toronto, Ont.,	" "

A. Permanent capital stock; total amount authorized, \$1,000,000; total amount subscribed, \$839,850, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies' Acts or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid.
		\$	\$	\$ c.	\$ c.
1. Fully called	6,298½	100	629,850	629,665 51	.....
2. 40 per cent. called	2,100	100	{ 184,000 26,000	105,788 80	.....
Totals	8,398½		839,850	735,454 31	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).		
A.—Permanent Capital Stock or Shares.		
1. (a) Ordinary joint stock capital fully called; total called, \$629,850; total paid thereon	\$629,665	51
2. (b) Ordinary joint stock capital, 40 per cent. called; total called, \$84,000; total paid thereon	84,000	00
3. (cc) Joint Stock Capital paid in advance of calls	21,788	80
4. (d) Dividends declared in respect of (1), (2) and (3), but not yet paid	18,386	30
6. (f) Reserve fund in respect of (1), (2) and (3)	64,000	00
7. (g) Contingent fund in respect of (1), (2) and (3)	19,864	21
		\$837,704 82
Liabilities to the Public.		
27. Deposits (including unclaimed deposits) payable on demand	\$3,343	15
29. Debentures issued in Canada	32,000	00
30. Interest due and accrued on (29)	500	89
31. Debentures issued elsewhere than in Canada	495,454	77
32. Interest due and accrued on (31)	4,954	15
37. Owing to banks	8,730	51
		544,983 47
Total liabilities		\$1,382,688 29

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property Owned Beneficially by Corporation.		
5. (b) Freehold land (including buildings) other than foregoing	\$58,981	00
6. (c) Leasehold land (including buildings) other than foregoing	4,100	00
		\$63,081 00
B.—Debts secured by Mortgages of Land.		
9. (a) Debts (other than item 10) secured by mortgages of land	\$869,201	97
10. (b) Debts secured by mortgaged land held for sale	38,550	00
		907,751 97
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
20. (h) Debts secured only by permanent stock or shares of the Corporation	\$51,285	79
22. (j) Stocks owned by Company	340,000	00
		391,285 79
E.—Cash.		
31. (a) On hand	\$11,932	87
32. (b) In banks	8,636	66
		20,569 53
Total assets		\$1,382,688 29

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.		
A.—Balance from 31st December, 1903.		
	(Col. 3.)	(Total Col. 4.)
(b) Cash (not already shown under (1)) :—		
2. (i) On hand		\$17,943 95
3. (ii) In bank		25,893 07
B.—Sums received wholly or partly on Capital Stock.		
4. (aa) Joint Stock Capital received in advance of call	\$12	20
5. (b) Premium on (4)	50	
		12 70
C.—Receipts on account of Investments, Loans or Debts.		
(a) On mortgages of realty :—		
10. (i) Principal		263,048 38
11. (ii) Interest		55,375 04
D.—Receipts from Real Estate Owned Beneficially by Corporation.		
17. (b) Rents		16,922 95
F.—Borrowed Money.		
26. (b) Borrowed by taking deposits		70,682 62
27. (c) Borrowed on debentures		39,663 33
29. (e) Borrowed otherwise		8,730 51
G.—Other Sources.		
30. (a) Loans on stock		11,796 95
(b) Interest on stock		5,664 70
(c) Trustees mortgages		29,900 00
Totals		\$545,634 20

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.	
A.—Sums Loaned or Invested on Capital Account.	
	(Total Col. 4.)
1. (a) Loaned on mortgages* of realty	\$294,399 45
2. (b) Loaned or invested in other securities:—	
2. (i) Stocks	15,225 80
7. (e) Insurance and taxes advanced on property mortgaged to the Corporation..	9,207 63
B.—Expended on Stock Account.	
8. Dividends paid on permanent stock	36,772 20
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:	
19. (b) Deposits: Principal, \$70,871.05; interest, \$1,509.86	72,380 91
20. (c) Debentures issued in Canada: Principal, \$3,500; interest, \$1,592.40	5,092 40
21. (d) Debentures issued elsewhere: Principal, \$14,551.33; interest, \$19,323 73	33,875 06
D.—Management Expenses (other than foregoing).	
25. (a) Salaries, wages and fees	11,880 22
26. (b) Commission or brokerage	2,409 25
28. (d) Stationery, postage, printing and advertising	565 40
29. (e) Law costs	2,281 18
30. (f) Fuel, rent and taxes (other than in 7 and 32) and rates	1,099 88
31. (g) Travelling expenses	305 11
32. (h) Registration fee	105 00
33. (i) Other management expenditure	4,222 23
E.—Other Expenditure.	
34. (a) Sterling exchange and debenture expenses	1,242 95
35. (b) Trustees mortgages	34,600 00
F.—Balance.	
37. (a) Cash on hand and in banks	20,569 53
Totals	\$545,634 20

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$14,500.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 19 5, \$177,852.33.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$96,248.86.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3 per cent.; on debentures, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.90 per cent.; on other securities, 5.20 per cent.
7. Of the mortgages held by the Corporation, \$376,430.06 is on realty situate in Ontario, and \$594,402.21, is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$7,379.43.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, estimated, \$2,500,000.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Secretary, \$5,000; accountant, \$3,000; cashier, \$1,000; clerk, \$1,000.
(b) By Guarantee Company.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed): For 1904, T. E. P. Trew, T. McLeary, Toronto. For 1905: T. E. P. Trew, and T. McLeary, Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January and 2nd July, 5 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 8th February.
17. Date of last Annual Meeting? 22nd February, 1904.

THE INDUSTRIAL MORTGAGE AND SAVINGS COMPANY.

Head Office, Sarnia.

Incorporated under the Building Societies Act, R.S.O., 1887, c. 169, by declaration filed with the Clerk of the Peace for the County of Lambton, 20th August, 1889.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Industrial Mortgage and Savings Company, of Sarnia, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation at at No. 181 Front Street, in the Town of Sarnia, in the Province of Ontario.

The Board is constituted of ten directors, holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

John Cowan, K.C., President, Sarnia,	January 1904,	January 1906.
Malcolm McGugan, Vice-President, Strathroy,	November 3, 1903,	" 1905.
W. G. Willoughby, 2nd Vice-President, Walnut,	June, 1904,	" 1906.
Thomas Howden, Director, Sarnia,	Jan., 1903,	" 1905.
Thomas Symington, Director, Sarnia,	" 1903,	" 1905.
Joseph Hall, Director, Forest,	" 1903,	" 1905.
Peter Grant, Director, Avonroy,	" 1904,	" 1906.
James Purvis, Director, Sarnia,	" 1903,	" 1905.
Wm. Armstrong, Director, Mandaumin,	" 1904,	" 1906.
John McFarlane, Director, Mandaumin,	" 1904,	" 1906.
D. N. Sinclair, Manager, Sarnia, August, 1900.		

A. Permanent capital stock: Total amount authorized, \$500,000; total amount subscribed, \$450,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of Shares.	Par value of shares.			
4 Fully called.....	9,000	\$ 50	\$ 450,000	\$ 445,991.23	\$ 4,008.77

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$450,000;		
total paid thereon	\$445,991 23	
4. (d) Dividends declared in respect of (1), but not yet paid	13,322 10	
6. (f) Reserve fund in respect of (1)	120,022 36	
		\$579,335 68

(Liabilities to the Public.

27. Deposits payable on notice	\$485,848 57	
28. Interest on deposits, due or accrued or capitalized	15,113 57	
29. Debentures issued in Canada	274,595 20	
30. Interest due and accrued on (29)	3,887 02	
		779,444 36
Total liabilities		\$1,358,780 04

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$1,263,459 49	
11. (c) Interest due or accrued on item (9) and not included therein..	7,133 77	
		\$1,270,593 26

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Debts secured by municipal bonds or debentures	\$51,782 39	
20. (h) Debts secured only by permanent stock or shares of the Corporation	22,390 85	
		74,173 24

E.—Cash.

31. (a) On hand	\$4,332 87	
33. (b) In bank	9,180 67	
		13,513 54

F.—Assets not hereinbefore Mentioned.

35. (a) Office furniture		500 00
Total assets		\$1,358,780 04

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

1.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

2. (i) On hand	(Col. 1.)	(Total Col. 4.)
3. (ii) In bank		\$2,635 99
		3,044 81

B.—Sums received wholly or partly on Capital Stock.

4. (a) Call on joint stock permanent capital	3,436 75
--	----------

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—		
10. (i) Principal	\$158,491 22	
11. (ii) Interest	55,669 09	
On other securities.—		
12. (i) Principal	24,018 96	
13. (ii) Interest or dividends	2,923 42	
		241,102 69

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	\$694,291 37	
27. (c) Borrowed on debentures	154,304 50	
		848,595 87

G.—Receipts from other sources, viz.:

30. (a) General interest		32 05
Totals		\$1,098,848 16

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty	\$174,785 71	
(b) Loaned or invested in other securities, viz.:		
2. (i) Municipal debentures	15,602 56	
3. (ii) Permanent stock	11,138 16	\$201,526 42

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$26,413 75	26,413 75
--	-------------	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

18. Bank account (principal and interest)		798 40
19. Deposits: Principal, \$734,442.37; interest, \$397.36	734,839 73	
20. Debentures issued in Canada: Principal, \$107,885.50; interest, \$8,839.03 ..	116,524 53	851,364 26

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$3,411 30	
26. (b) Commission or brokerage	233 77	
28. (c) Stationery, postage, printing and advertising	351 96	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	996 56	
31. (g) Travelling expenses	133 20	
32. (h) Registration fee	105 00	5,231 79

F.—Balance.

37. (a) Cash on hand and in bank		13,513 54
Total		\$1,098,848 16

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of Debentures issued by the Corporation in Canada which will mature in 1905, \$81,536.30.
2. Amount of Debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by Corporation which will mature and become payable to the Corporation in 1905, \$109,949.97.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3 per cent.; on debentures, 3.75 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.10 per cent., on other securities, 4.25 per cent.
7. Of the mortgages held by the Corporation all are on realty situate in Ontario.
8. Loans written off or transferred to real estate during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceeding, have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$2,000,000, estimated.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$12,000; accountant, \$6,000; and assistant, \$1,000. By private sureties.
13. When were the accounts of the Corporation last audited? Audited monthly.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed): For 1904, D. D. Moshier and John Farquharson; for 1905, D. D. Moshier and A. V. Collins.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? Dividends paid 2nd January, and 2nd July at the rate of 6 per cent. per annum.
16. What is the date appointed for the Annual Meeting? No fixed date.
17. Date of last Annual Meeting? 3rd February, 1904, and 8th February, 1905.

THE LAMBTON LOAN AND INVESTMENT COMPANY.

Head Office, Sarnia, Ontario.

Incorporated under the Building Societies Act, 9 Vic. c. 90 (Province of Canada) by declaration filed on 27th March, 1847, with the Clerk of the Peace for the Western District. The original corporate name was "The Port Sarnia Building Society." The Society was reorganized as "The Lambton Permanent Building and Investment Society" under chapter 53 of the Consolidated Statutes of Upper Canada, by declaration filed 19th June, 1855, with the Clerk of the Peace for the County of Lambton. This latter corporate name was changed by Order-in-Council, 4th June, 1880, to The Lambton Loan and Investment Company.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The Lambton Loan and Investment Company, of Sarnia, Ontario, at the 31st of December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 191 Front Street, in the Town of Sarnia, in the Province of Ontario.

The Board is constituted of eight directors holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Isaac Unsworth, President, Florence	Jan. 1904, Jan., 1906.
Norman S. Gurd, Vice-President, Sarnia,	" 1904, " 1906.
John Paul, Director, Sarnia;	" 1904 " 1906.
A. Laing, Director, Wyoming;	" 1905 " 1907.
Thomas Boulton, Director, Moore;	" 1905 " 1907.
Robert Mackenzie, Director, Sarnia;	" 1905, " 1907.
Charles Mackenzie, Director, Sarnia;	" 1905, " 1907.
Antrobus C. Clark, Director, Sarnia,	" 1904 " 1906.
J. H. Kittermaster, Manager, Sarnia,	

A. Permanent Capital Stock; total amount authorized, \$1,000,000; total amount subscribed, \$500,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Buildings Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of Shares.	Par value of shares.	—		
1. Fully called.....	10,000	\$ 50	\$ 500,000	\$ 500,000	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders and Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$500,000; total paid thereon	\$500,000 00	
6. (f) Reserve fund in respect of (1)	330,000 00	
7. (g) Contingent fund in respect of (1)	9,522 44	
		\$839,522 44

Liabilities to the Public.

27. Deposits: Payable on demand, estimate, \$6,000.00; estimate payable on notice, \$520,954.22	\$526,954 22	
28. Interest on deposits due, or accrued or capitalized	16,356 14	
29. Debentures issued in Canada	174,629 63	
30. Interest due and accrued on (29)	2,931 04	
37. Owing to banks (including interest due or accrued)	41,488 33	
		762,359 36
Total liabilities		\$1,601,881 80

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:—		
2. (i) At Town of Sarnia, held in freehold		\$6,000 00

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$1,463,384 48	
10. (b) Debts secured by mortgaged land held for sale	1,611 20	
		1,464,995 68

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Debts secured by municipal bonds or debentures	\$61,854 05	
16. (d) Debts secured by Loan Corporation debentures	26,993 74	
20. (h) Debts secured only by permanent stock or shares of the Corporation	31,680 96	
		120,528 75

E.—Cash.

31. (a) On hand	10,357 37	
Total assets		\$1,601,881 80

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

2. (b) Cash (not already shown under (1)) :—		
(i) On hand		\$9,947 35

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—		
10. (i) Principal	\$151,027 07	
11. (ii) Interest	69,243 92	
(b) On other securities :—		
12. (i) Principal	32,362 91	
13. (ii) Interest or dividends	5,210 13	
		257,844 03

F.—Borrowed Money.

25. (a) Bank or other advances, discounts or overdrafts	\$41,488 33	
26. (b) Borrowed by taking deposits	559,307 01	
27. (c) Borrowed on debentures	69,550 74	
		670,346 08

G.—Receipts from other sources, viz.:

30. (a) General interest	139 70	
Totals		\$938,277 16

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	\$178,301 65	
(b) Loaned or invested in other securities:—		
2. (i) Company's stock	21,012 64	
4. (iii) Loans on municipal debentures	9,239 95	
7. (e) Insurances or taxes advanced on property mortgaged to Corporation	1,316 54	
		\$209,870 78

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$40,000 00	40,000 00
--	-------------	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid:

18. (a) Bank account (principal and interest)	\$17,175 04	
19. (b) Deposits: Principal, \$599,361.53; interest \$360.95	599,722 48	
20. (c) Debentures issued in Canada: Principal, \$47,727.00; interest, \$5,726.22	53,453 22	
		670,350 74

D.—Management Expenses (other than foregoing).

25. (a) Salaries and fees	\$5,248 27	
26. (b) Commission or brokerage	361 89	
28. (d) Stationery, postage, printing and advertising	316 25	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	609 38	
31. (g) Travelling expenses	12 65	
32. (h) Registration fees	132 00	
33. (i) Sundries	568 85	
		7,249 29

E.—Other Expenditures, viz.:

34. (a) General interest	448 98
--------------------------------	--------

F.—Balance.

37. (a) Cash on hand	10,357 37
----------------------------	-----------

Totals	\$938,277 16
--------------	--------------

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$70,111.74.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, estimated, \$200,000.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3 per cent.; on debentures, 3.55 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.333 per cent.; on other securities, 4.25 per cent.
7. Of the mortgages held by the Corporation \$1,362,738.80 is on realty situate in Ontario, and \$102,256.88 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$2,195,076.22.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond, and for what sum respectively? Manager, \$10,000; Accountant, \$5,000; Assistant Accountant, \$5,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? Daily audit.
14. Name and address of the auditors respectively for 1904 and 1905. For 1904, T. W. Nisbet, Sarnia, Ont., and F. C. Watson, Sarnia, Ont.; for 1905, T. W. Nisbet, Sarnia, Ont., and F. C. Watson, Sarnia, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 1st January, 1904, and 1st July, 1904. 8 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 4th Wednesday in January.
17. Date of last Annual Meeting? 1st February, 1905.

THE LANDED BANKING AND LOAN COMPANY.

Head Office, Hamilton, Ontario.

Incorporated under the Building Societies Acts, Consol. Stat. U.C., chap. 53, by declaration filed with the Clerk of the Peace for the County of Wentworth, 16th December, 1876.

The lending and borrowing powers are governed by the Loan Corporations Act, R. S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Landed Banking and Loan Company of Hamilton, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 31 James Street south, in the City of Hamilton, in the Province of Ontario.

The Board is constituted of six directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Matthew Leggat, President, Hamilton,	18th Feb'y, 1904; 15th Feb'y, 1905.
John Waldie, Vice-President, Toronto,	" "
Hon. Thos. Bain, Director, Dundas,	" "
Samuel Barker, M.P., Director, Hamilton,	" "
Charles Mills, Director, Hamilton,	" "
C. W. Cartwright, Treasurer, Hamilton,	" "

A. Permanent Capital Stock: Total amount authorized, \$700,000; total amount subscribed, \$700,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.	—		
Fully paid	7,000	\$ 100	\$ 700,000	\$ 700,000	\$

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).	
A.—Permanent Capital Stock or Shares.	
1 (a) Ordinary joint stock capital fully called: total called, \$700,000; total paid thereon.....	\$700,000 00
4. (d) Dividends declared in respect of (1) but not yet paid	21,000 00
5. (e) Unappropriated profits in respect of (1)	3,563 43
6. (f) Reserve fund in respect of (1)	240,000 00
Carried forward	\$964,565 43

Brought forward		\$964,565 43
Liabilities to the Public.		
27. Deposits	\$418,053 64	
28. Interest on deposits, due or accrued or capitalized	1,211 24	
29. Debentures issued in Canada	670,854 91	
30. Interest due and accrued on (29)	8,619 33	
31. Debentures issued elsewhere than in Canada	312,876 99	
32. Interest due and accrued on (31)	1,743 13	
40. Other liabilities to the public, viz.:		
41. (a) Directors, auditors, valuers, etc.	2,887 38	
		1,416,246 62
Total liabilities		\$2,380,812 05

Cr.	Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property owned Beneficially by Corporation.		
5. (b) Freehold land (including buildings) other than foregoing		\$60,599 05
B.—Debts secured by mortgages of land.		
9. (a) Debts (other than 10) secured by mortgages of land	\$2,051,411 36	
10. (b) Debts secured by mortgaged land held for sale	19,554 99	
		2,070,966 35
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
14. (b) Debts secured by municipal bonds or debentures	147,067 21	
15. (c) Debts secured by public school debentures	3,360 00	
20. (h) Debts secured only by permanent stock or shares of the Corporation	9,958 99	
22. (j) Debts secured by bank and other stocks	25,814 93	
		186,201 13
Cash.		
31. (a) On hand	143 84	
32. (b) In banks	62,901 68	
		63,045 52
Total assets		\$2,380,812 05

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.		
A.—Balances from 31st December, 1903.		(Col. 1.) (Total Col. 4.)
(a) Cash (not already shown under (1))		
	(i) On hand	\$1,226 79
	(ii) In bank	143,273 14
C.—Receipts on account of Investments, Loans or Debts.		
	(a) On mortgages of realty:	
10.	(i) Principal	583,352 70
11.	(ii) Interest	
	(b) On other securities	
12.	(i) Principal	
13.	(ii) Interest or dividends	
(c) Unsecured debts:		
15.	(i) Interest received from banks	1,584 74
		<hr/> 584,937 44
F.—Borrowed Money.		
26.	(b) Borrowed by taking deposits	889,907 52
27.	(c) Borrowed on debentures	138,477 45
G.—Receipts from other sources, viz.:		
30.	(a) Sundries	802 21
	Totals	<hr/> \$1,758,624 55

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		(Col. 1.) (Total Col. 4.)
1. (a) Loaned on mortgages of realty and other securities		\$629,936 81
B.—Expended on Stock Account.		
7. Dividends paid on permanent stock		42,000 00
C.—Borrowed money (other than foregoing) or Interest thereon paid, viz.:		
19. (b) Deposits: Principal, \$872,582.64; interest, \$1,168.41		873,751 05
20. (c) Debentures issued in Canada: Principal, \$88,750.37; interest, \$25,972.27		114,722 64
21. (d) Debentures issued elsewhere: Principal, \$3,893.33; interest, \$11,172.66		15,065 99
D.—Management Expenses other than foregoing.		
25. (a) Salaries and fees	\$8,738 19	
26. (b) Commission or brokerage	2,347 00	
28. (d) Stationery, postage, printing and advertising	941 58	
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	1,440 00	
31. (g) Travelling expenses	4,230 09	
32. (h) Registration fees and taxes	1,220 00	
		18,916 °6
E.—Other Expenditures, viz.:		
34. (a) Debenture expenses		1,185 63
F.—Balance.		
37. (a) Cash on hand and in banks		63,045 52
Totals		\$1,758,624 55

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$277,440.12.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, \$51,404.16.
3. Amount of other existing obligations of the Corporation which will mature in 1905. \$418,053.64.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, approximately, \$200,000.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits 3.25 per cent.; on debentures, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 6.286 per cent.; on other securities, 4.349 per cent.
7. Of mortgages held by the Corporation, \$1,003,708.95 is on realty situate in Ontario, and 1,047,702.41 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, nil.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$3,910,376.
11. How often are the securities held by the Corporation valued? Yearly or oftener if necessary.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Treasurer, \$10,000; accountant and teller, \$5,000 each; ledger keeper and inspectors, \$2,000 each.
13. When were the accounts of the Corporation last audited? January, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905: W. F. Findlay, F.C.A., and Wm. Marshall.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 1st January and 1st July. 6 per cent.
16. What is the date appointed for the Annual Meeting? Third Wednesday in February.
17. Date of last Annual Meeting? 17th February, 1904.

THE LONDON AND CANADIAN LOAN AND AGENCY COMPANY.

Head Office, Toronto, Ontario.

CONSTATING INSTRUMENTS.

1863. The Company was incorporated in 1863 by special Act of the Province of Canada, 27 V. c. 50, which has from time to time been amended by six special Acts of the Dominion of Canada, viz.:

- 1872. 35 V. c. 108 (D).
- 1873. 36 V. c. 107 (D).
- 1876. 39 V. c. 60 (D).
- 1879. 42 V. c. 75 (D).
- 1889. 52 V. c. 93 (D).
- 1891. 54-5 V. c. 114 (D).

For the lending powers of the Company see 27 V. (1863) c. 50 (Province of Canada), secs. 3 and 4; 35 V. (1872) c. 108 (D), sec. 5; also sec. 6 as amended by 36 V. (1873) c. 107 (D), s. 8; 36 V. (1873) c. 107 (D), sec. 9 and 35 V. (1872) c. 108 (D), sec. 7 as amended by 36 V. (1873) c. 107 (D), s. 10. See Statutes of Canada, 1899, 62, V. c. 117.

For the borrowing powers of the Company see 27 V. (1863) c. 50 (Province of Canada), s. 5, as amended by 36 V. (1873) c. 107 (D), sec. 1; 35 V. (1872), c. 108 (D), s. 8, as amended by 39 V. c. 50 (D), sec. 1; 54-5 V. (1891) c. 114 (D), s. 2. (Issue of debenture stock).

ANNUAL STATEMENT

Of the conditions and affairs of The London and Canadian Loan and Agency Company. (Limited), of Toronto, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 103 Bay Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of eight directors holding office for one year.

The directors and chief executive officers of the Corporation as at the 31st December, 1904, were as follows, together with their respective terms of office:

George R. R. Cockburn, M.A., Pres., Toronto, 17th Feb'y, 1904; 15th Feb'y, 1905.

Thomas Long, Vice-President, Toronto, "

Sir W. P. Howland, C.B., K.C.M.G., Dir., Toronto, "

Donald McKay, Director, Toronto, "

Lord Strathcona and Mount Royal, Dir., Montreal, "

Larratt W. Smith, K.C., D.C.L., Director, Toronto, "

Thomas R. Wood, Director, Toronto, "

Casimer S. Gzowski, Director, Toronto, "

Vernon B. Wadsworth, Manager, Toronto, "

William Wedd, Jr., Secretary.

A. Permanent capital stock: Total amount authorized, \$2,000,000; total amount subscribed, \$1,000,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies' Acts or Private Acts.

Last call made: Date, 1901; rate per cent., 5 per cent.; gross amount, \$50,000; amount paid thereon, \$50,000.

Description.	No. of Shares.	Par value.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
		\$	\$	\$	\$
1. Fully paid.....	20,000	50	1,000,000	1,000,000	—

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities of Stockholders or Shareholders.)

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called: Total called, \$1,000,000; total paid thereon	\$1,000,000 00	
4. (d) Dividends declared in respect of (1)	30,000 00	
5. (e) Unappropriated profits in respect of (1)	25,678 39	
6. (f) Reserve fund in respect of (1)	210,000 00	
7. (g) Contingent fund in respect of (1)	24,692 68	
		\$1,290,371 07

Liabilities to the Public.

27. Special deposits payable on demand	5,000 00	
28. Interest on deposits, due, or accrued or capitalized	16 98	
29. Debentures issued in Canada	13,700 00	
30. Interest due or accrued on (29)	273 23	
31. Debentures issued elsewhere than in Canada	1,522,244 66	
32. Interest due or accrued on (31)	29,006 18	
35. Debenture stock issued elsewhere than in Canada	479,853 34	
36. Interest due and accrued on (35)	2,418 93	
37. Owing to Banks (including interest due or accrued) in Britain ..	24,272 99	
40. Other liabilities to the public, viz:		
41. (a) Sundry creditors (outstanding cheques, etc.)	30,911 96	
42. (b) Sterling certificates payable at fixed dates	72,333 64	
43. (c) Interest due and accrued on same	1,546 05	
		2,181,577 96
Total liabilities		\$3,471,949 03

Cr.

Assets.

A.—Immovable Property Owned Beneficially by Corporation.

I.—Assets of which the Corporation is the Beneficial Owner.

1. (a) Office premises situate as follows:—

2. (i) At Toronto, Ontario, held in leasehold	\$75,000 00	
5. (b) Freehold land (including buildings) ther than foregoing	27,462 71	
6. (c) Leasehold land (including buildings) other than foregoing ..	2,296 42	
		\$104,769 13

B.—Debts Secured by mortgages of land.

9. (a) Debts (other than item 10) secured by mortgages on land ..	1,996,153 60	
10. (b) Debts secured by mortgaged land held for sale	127,105 29	
10. (bb) Debts secured by land held by the Company as mortgagee in possession, or secured by land for the rents and profits of which the Company is accountable	97,304 38	
11. (c) Interest due or accrued on items 9 and 10 and not included therein	61,942 08	
		\$2,282,505 35

C.—Debts not above enumerated for which the Corporation holds securities as follows:—

22. (j) Municipal bonds or debentures owned by Company	292,503 42	
23. (k) School debentures owned by Company	92,067 21	
24. (l) Bonds of Corporation owned by Company	1,435 00	
25. (m) Hypothecations of stock, etc.	636,603 59	
26. (n) Interest due or accrued on items 22 to 25 and not included therein	14,906 53	
		1,037,516 75

E.—Cash.

32. (b) In banks in Canada	45,215 90	
----------------------------------	-----------	--

F.—Assets not hereinbefore mentioned.

37. (a) Sundry debtors	1,952 90	
------------------------------	----------	--

Total assets		\$3,471,949 03
--------------------	--	----------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its own Use.

A.—Balance from 31st December, 1903.

2. (b) Cash (not already shown under (1)):	(Col. 1.)	(Total Col. 4.)
3. (ii) In banks		\$65,480 86

C.—Receipts on Account of Investments, Loans or Debts.

(a) On mortgages of realty:—

10. (i) Principal		459,611 69
11. (ii) Interest	\$126,264 41	126,264 41

(d) On other securities:

12. (i) Principal		1,555,772 63
13. (i.) Interest or dividends	60,486 40	60,486 40

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales not included in any of the foregoing items.....	}	8,017 25
17. (b) Rents		

F.—Borrowed Money.

27. (c) Borrowed on debentures or certificates payable at fixed dates		367,989 04
G.—Receipts from other sources.		
30. (a) Added to Contingent Account		564 18
(b) Outstanding cheques, etc.		1,599 62
Total		\$2,646,756 08

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty		\$498,333 22
(b) Loaned or invested in other securities, viz.:		
2. (i) Loans on stocks, bonds, life insurance policies, etc.		1,377,215 01
3. (ii) Invested on municipal, school and other debentures		43,043 83
6. (c) Real estate, payments out during year		6,204 26

B.—Expended on Stock Account.

8. Dividends paid on permanent stock (including amounts reserved in 1902-3	60,000 00	60,000 00
--	-----------	-----------

C.—Borrowed money (other than foregoing) or interest thereon, paid, viz.:

18. (a) Bank account, Principal, \$23,609.84; Interest	7,002 43	30,612 27
21. (d) Debentures, etc., issued elsewhere: Principal, \$466,709.38; Interest, \$83,802.48, including interest on debenture stock..	83,802 48	550,511 86
Brought forward	\$150,804 91	\$2,565,920 45

CASH ACCOUNT.

Expenditure.—Continued.

Forward	\$150,804 91	\$2,565,920 45
D.—Management Expenses (other than foregoing).		
25. (a) Salaries and directors' fees, Ontario and Manitoba	17,235 14	
26. (b) Commission on debentures issued and renewed and loans made and renewed	6,153 61	
27. (c) Agency charges, British directors' fees	1,757 00	
28. (d) Stationery, Postage, Printing and Advertising, etc.	2,946 49	
29. (e) Law costs	316 20	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates, including tax on capital and income	3,017 82	
31. (g) Travelling expenses	1,388 47	
32. (h) Registration fee, Loan Corporations Act	205 00	
		33,019 73
E.—Other Expenditure, viz.:		
33. (a) Paid President and Auditors as per resolution Annual Meeting	1,600 00	1,600 00
F.—Balance.		
37. Cash in various banks in Canada		45,215 90
Total		\$2,645,756 08

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, \$344,795.00.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$917,372.00.
5. Average rate of interest per annum paid by the Corporation during 1904 on special deposits, 4 per cent.; on debentures, etc., 3 9-10 per cent.; on debenture stock, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on all their mortgages of realty, 5 7-10 per cent.; on other securities, 5 per cent.
7. Of the mortgages held by the Corporation, \$1,185,063.00 is on realty situate in Ontario, and \$1,035,501.00 is on realty situated elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, about \$6,000,000.
11. How often are the securities held by the Corporation valued? Yearly or oftener if necessary.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$4,000; Secretary, \$4,000; Local Manager, Winnipeg, \$4,000; Clerks in Toronto and Winnipeg, \$18,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? Audited monthly; last full yearly audit 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905. For 1904, G. H. G. McVity and Jas. George, F.C.A., Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January, 1904, 3 per cent.; 2nd July, 1904, 3 per cent.
16. What is the date appointed for the Annual Meeting? 15th February, 1905.
17. Date of last Annual Meeting? 17th February, 1904.

THE LONDON LOAN COMPANY OF CANADA.

Head Office, London, Ontario.

Incorporated under the Building Societies Act, (Consol. Stat. U. C. chap. 53), by declaration filed with the Clerk of the Peace for the County of Middlesex, 2nd May, 1877.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the London Loan Company of Canada, of London, Ontario, at the 31st of December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 433 Richmond Street, in the City of London, in the Province of Ontario.

The Board is constituted of five directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

R. W. Puddicombe, Pres., London;	11th Feb'y., 1904; 9th Feb'y., 1905.
J. A. Nelles, M.D., 1st Vice-Pres., London,	" "
George G. McCormick, 2nd Vice-Pres., London,	" "
Albion Parfitt, Director, London,	" "
Thomas Kent, Director, London,	" "
M. J. Kent, Manager, London.	

A. Permanent capital stock: Total amount authorized, not limited; total amount subscribed, \$679,405.62 as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Buildings Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid.
	No. of shares.	Par value.			
1. Fully called	13,588	\$ 50 00	\$ 679,400 00	\$ 679,400 00	
2. Partly called	1	5 ¢2	5 ¢2	5 ¢2	
Total	13,589		679 405 62	679 405 62	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders.)		
A.—Permanent Capital Stock or Shares.		
1. (a) Ordinary joint stock capital fully called; total called, \$679,405.62; total paid thereon	\$679,405 62	
5. (e) Unappropriated profits in respect of (1)	258 02	
6. (f) Reserve fund in respect of (1)	106,000 00	
		\$785,663 64
Liabilities to the Public.		
27. Deposits payable on notice	482,363 00	
29. Debentures issued in Canada	459,438 30	
30. Interest due and accrued on (29)	5,231 49	
31. Debentures issued elsewhere than in Canada	222,163 33	
32. Interest due and accrued on (31)	1,270 85	
37. Owing to banks (including interest due and accrued)	13,448 64	
		1,183,915 51
Total Liabilities		\$1,969,579 15

Cr.	Assets.
I.—Assets of which the Corporation is the Beneficial Owner.	
B.—Debts secured by mortgages of land.	
9. (a) Debts (other than item 10) secured by mortgages of land	\$1,741,711 00
C.—Debts not above enumerated for which the Corporation holds securities as follows:	
14. (b) Debts secured by municipal bonds or debentures	\$9,947 00
16. (d) Debts secured by Loan Corporation debentures	2,490 00
20. (h) Debts secured only by permanent stock or shares of the Corporation	82,248 00
22. (j) Debts secured by other stocks	5,261 00
	99,946 00
E.—Cash.	
31. (a) On hand	4,064 02
(b) In banks	17,289 13
	21,353 15
F.—Assets not hereinbefore mentioned.	
37. (a) Loan companies' stocks	\$106,569 00
Total assets	\$1,969,579 15

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its own Use.			
A.—Balances from 31st December, 1903.			
	(Col. 3.)	(Total Col. 4.)	
1. (a) Capital account and reserve, (including \$5,000 added in 1904)	\$679,405 62		
(b) Cash (not already shown under (1)) :	106,000 00		
2. (i) On hand		\$5,313 07	
3. (ii) In bank		13,788 60	
C.—Receipts on account of Investments, Loans and Debts.			
(a) Mortgages of realty:—			
10. (i) Principal		315,453 37	
11. (ii) Interest		93,191 39	
(b) On other securities: Included in 10 and 11.			
E.—Miscellaneous.			
19. (b) Premium or bonus on loans. Included in No. 11.			
25. (a) Bank or other advances, discounts or overdrafts		13,448 64	
F.—Borrowed Money.			
26. (b) Borrowed by taking deposits		1,121,719 96	
27. (c) Borrowed on debentures		302,985 10	
G.—Receipts from other sources, viz.:			
30. (a) Petty cash		481 98	
Totals	\$785,405 62	\$1,866,382 11	

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expenditure on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account..	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty		\$517,995 91
(b) Loaned or invested in other securities. Included in 1.		
B.—Expended on Stock Account.		
8. Dividends paid on permanent stock	\$40,764 32	40,764 32
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:		
19. (b) Deposits: Principal, \$1,119,900.16; interest, \$16,775.60		1,136,675 76
20. (c) Debentures issued in Canada: Principal, \$111,422.11; interest, \$12,475.18		123,897 29
21. (d) Debentures issued elsewhere: Principal, \$4,380.00; interest, \$9,191.29		13,571 29
D.—Management Expenses (other than foregoing).		
25. (a) Salaries and fees		4,947 22
26. (b) Commission or brokerage		2,923 31
28. (d) Stationery, postage, printing and advertising		501 59
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates		2,209 39
31. (g) Travelling expenses		1 7 05
32. (h) Registration fees		125 00
33. (i) Sundries		298 60
E.—Other Expenditures, viz.:		
34. (a) Interest		929 23
F.—Balance.		
37. (b) Cash on hand and in banks		21,353 15
Totals	\$40,764 32	\$1,866,382 11

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$271,359.45.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, \$47,206.66.
3. Amount of other existing obligations of the Corporation which will mature in 1905. exclusive of deposits. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. Estimated at \$300,000.00.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.389 per cent.; on debentures 4.319 per cent.; on debenture stock, nil.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5 1-4 per cent.; on other securities, 5 1-4 per cent.
7. Of the mortgages held by the Corporation \$1,740,490.00 is on realty situate in Ontario, and \$1,221.00 elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No 3, amount, \$8,100.
10. Aggregate market value of the land mortgaged to the Corporation, \$3,176,332.00.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? The Manager, \$10,000; Cashier, \$10,000; Mortgage Clerk, \$2,000; and Ledger Keeper, \$2,000.
(b) By private sureties and Guarantee Companies.
13. When were the accounts of the Corporation last audited? 31st December. 1904.
14. Names and addresses of the auditors for 1904: C. W. A. Woodburn and H. C. Screaton. London, Ont.; for 1905, not yet appointed.
15. When were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 30th June and 31st December. 3 per cent. dividend paid on each date.
16. What is the date appointed for the Annual Meeting? 2nd Thursday in February.
17. Date of last Annual Meeting? 11th February, 1904.

THE MIDLAND LOAN AND SAVINGS COMPANY.

Head Office, Port Hope, Ontario.

Incorporated under the Building Societies Act, Consol. Stat. U.C., Chap. 53, by declaration filed with the Clerk of the Peace for the United Counties of Northumberland and Durham, 5th July, 1872. (Decl. Book II. 127.)

The corporate name was, by Order in Council of Ontario, 21st June, 1876 (*Ibid*), changed to the Midland Loan and Savings Company.

A by-law altering the amount of the capital stock and par value of the shares was, pursuant to the Loan Corporations Act, approved by Order in Council of Ontario, 3rd October, 1900.

The borrowing and lending powers are governed by the Loan Corporations Act R. S.O., 1897 c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Midland Loan and Savings Company, of Port Hope, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is on Walton Street, in the Town of Port Hope, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

John Mulligan, President, Port Hope; 4th February, 1879.	
Henry H. Burnham,, Vice-President, Port Hope,	3rd February, 1880.
William Quay, Director, Port Hope;	3rd " 1885.
J. W. Clemesha, M.D., Director, Port Hope;	4th " 1890.
J. H. Helm, Director, Port Hope;	7th August, 1891.
William Henwood, Director, Welcome;	7th " 1891.
S. S. Dickinson, V.S., Director, Port Hope;	27th April, 1904.
George M. Furby, Manager and Secretary;	1st March 1882.
J. H. Helm, Assistant Manager;	13th February, 1903.

A. Permanent capital stock: Total amount authorized, unlimited; total amount subscribed \$360,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsist- ing at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value.	—		
1. Fully called	36,000	\$ 10	\$ 360,000	\$ 360,000	\$

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$360,000; total paid thereon	\$360,000 00	
4. (d) Dividends declared in respect of (1), but not yet paid	10,818 00	
5. (e) Unappropriated profits in respect of (1)	8,681 60	
6. (f) Reserve fund in respect of (1)	130,000 00	
7. (g) Contingent fund in respect of (1)	439 94	
		\$509,939 54

Liabilities to the Public.

27. Deposits (including unclaimed deposits)	393,220 34	
28. Interest on deposits, due or accrued or capitalised	13,609 30	
29. Debentures issued in Canada	473,200 63	
30. Interest due and accrued on (29)	9,780 65	
		889,810 92

Total liabilities \$1,399,750 46

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:		
2. (i) At Port Hope, held as freehold	\$5,000 00	
5. (b) Freehold land (including buildings) other than foregoing (foreclosed)	16,337 14	
		\$21,337 14

B.—Debts secured by mortgages of land.

9. (a) Debts (other than item 10) secured by mortgages of land	1,240,129 28	
11. (c) Interest due and accrued on item 9 and not included therein	38,790 55	
		1,278,919 83

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Debts secured by municipal bonds or debentures	62,710 68	
20. (h) Debts secured only by Permanent Stock or Shares of the Corporation	7,957 06	
26. (n) Interest due or accrued on items 14 and 20 and not included therein	495 55	
		71,163 29

D.—Unsecured Debts.

27. (a) Rents due or accrued on Company's property		542 96
--	--	--------

E.—Cash.

31. (a) On hand	800 00	
32. (b) In banks	26,987 24	
		27,787 24

Total assets \$1,399,750 46

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(Col. 4.)

1. (b) Cash not already shown under (1):		
2. (i) On hand	\$800 00	
3. (ii) In bank	36,619 98	

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:		
10. (i) Principal	174,399 43	
11. (ii) Interest	64,457 11	
(b) On other securities:		
12. (i) Principal	92,582 30	
13. (ii) Interest	6,518 20	

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rents		659 50
---------------------	--	--------

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	461,780 28	
27. (c) Borrowed on debentures	244,061 91	

G.—Receipts from other sources, viz.:

30. (a) Commission, etc., applied in reduction of Expense Account		908 00
---	--	--------

Totals \$1,082,786 01

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.	
A.—Sums Loaned or Invested on Capital Account.	
1. (a) Loaned on mortgages of realty	Total (Col.4.) \$151,719 97
2. (b) Loaned or invested in other securities,	
3. (i) On municipal debentures	86,750 00
(ii) On Shares of Corporation	5,694 35
B.—Expended on Stock Account.	
8. Dividends paid on permanent stock	21,693 30
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:	
19. (b) Deposits: Principal, \$472,120.35; Interest, \$13,645.20	485,765 55
20. (c) Debentures issued in Canada. Principal, \$273,588.16; Interest, \$17,212.15	290,800 31
D.—Management Expenses (other than foregoing).	
25. (a) Salaries and fees	6,477 76
26. (b) Commission	972 95
28. (c) Stationery, postage, printing and advertising	288 51
29. (e) Law costs	66 57
30. (f) Fuel, taxes (other than in 7 and 32) and rates, etc.	726 90
31. (g) Travelling expenses	244 75
32. (h) Registration fees	105 00
Sundry expenses and repairs	156 88
E.—Other Expenditure, viz.:	
33. (a) Contingent account—written off	3,536 87
F.—Balance.	
37. (a) Cash on hand and in banks	27,787 24
Total	\$1,082,786 01

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. \$208,586.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$63,850.00.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.33 per cent.; on debentures, 3.70 per cent.; on both 3.53.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty and other securities, 5.33.
7. Of the mortgages held by the Corporation, \$1,240,129.28 is on realty situate in Ontario, and none on realty elsewhere.
8. Loans written off or transferred to real estate account, \$3,536.87.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, estimated \$2,260,000.00.
11. How often are the securities held by the Corporation valued? Once each year.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$6,000; teller, \$3,000; ledger keeper, \$2,000. By both Guarantee Companies and private securities.
13. When were the accounts of the Corporation last audited? 16th January, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905: For 1904, John David Smith and Henry White, Port Hope; for 1905, John David Smith and Henry White, Port Hope.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January, 3 per cent.; 2nd July, 3 per cent.
16. What is the date appointed for the Annual Meeting? First Tuesday in February.
17. Date of last Annual Meeting? 2nd February, 1904.

THE NORTH OF SCOTLAND CANADIAN MORTGAGE CO., LIMITED.

Head Office, Aberdeen, Scotland.

Chief Agency for Ontario: North of Scotland Chambers, No. 18 King St. west, Toronto.

Attorneys and agents to receive service and notice under the Loan Corporations Act. (P. of Att'y 16th June, 1897): Edmund Boyd Osler, Toronto, and Herbert Carlyle Hammond, Toronto, or either of them.

Agents to affix corporate seal to instruments. (P. of Att'y 18th July, 1898:) Edmund Boyd Osler, Toronto, or Henry James Bethune, Toronto, and Allen Bristol Aylesworth, Toronto, or Walter Barwick, Toronto, or any two of them.

CONSTATING INSTRUMENTS.

The Company was incorporated under the (Imp.) Companies Acts, 1862 and 1867 as a Joint Stock Company by Memorandum and Articles of Association both dated 14th December, 1875, and registered on the 17th December, 1875, in the office of the Registrar of Joint Stock Companies for Scotland at Edinburgh.

The said articles were amended by special resolutions of the following dates respectively:

(i.) Passed 29th December, 1876; confirmed 13th January, 1877, increasing the capital of the Company to £500,000 in £10 shares.

(ii.) Passed 15th April, 1878; confirmed 30th April, 1878, increasing the capital of the Company to £750,000 in £10 shares and amending section 8, clause XIII., (remuneration of Directors).

(iii.) Passed 19th August, 1891; confirmed 4th September, 1891, repealing article 27 (respecting transfer book) and substituting new article; also repealing article 52 (respecting general meetings), and substituting new article; also repealing article 82 (7) (respecting power and mode of borrowing); also amending article 83, adding thereto the following provision: "A minute endorsed on the debentures of the Company and signed by the secretary or other officer of the Company duly authorized by the directors for that purpose, shall be sufficient evidence of the terms of renewal of any such debenture."

As to lending and borrowing in Ontario, see the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the North of Scotland Canadian Mortgage Company, Limited, of Aberdeen, Scotland, at the 11th of November, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 201 Union Street, in the City of Aberdeen, in the County of Aberdeen, Scotland.

The chief agency for Ontario is situated at No. 18 King Street, west, City of Toronto.

The chief agents and attorneys for Ontario are Messrs. Osler and Hammond, and their address is 18 King Street west, Toronto, in the Province of Ontario.

The Board is constituted of six directors holding office for three years.

The directors and chief executive officers of the Corporation at the 11th November, 1904, were as follows, together with their respective terms of office:

James W. Barclay, Chairman, London England,	27th Dec. 1902; Dec., 1905.
Alex. M. Ogston, Deputy-Chairman, Aberdeen Scot.,	26th " 1903; " 1906.
William Davidson, Director, Blythwood, Scotland,	26th " 1903; " 1906.
James Milne, Director, Kinaldie, Aberdeen, Scot.,	27th " 1901; " 1904.
Wm. C. Smith, K.C., Director, Edinburgh, Scotland,	27th " 1901; " 1904.
James Walker, Director, Richmondhill;	24th Oct., 1904; " 1905.
Wm. Smith, Secretary, Canada House, Aberdeen, Scotland.	

A. Permanent capital stock: Total amount authorized, \$3,650,000; total amount subscribed, \$3,650,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(b). Fixed and Permanent Capital Stock Created by Virtue of Joint Stock Companies Acts or Private Acts.

Description.	No. of Shares.	Par value of Shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
2. 20 per cent. called	75,000	£ 10	£ sterling 750,000	£ sterling 150,000	£ sterling None.

LIST OF SHAREHOLDERS AS AT 11TH NOVEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 11TH NOVEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital, 20 per cent. called: Total called, \$730,000; total paid thereon	\$730,000 00
4. (d) Dividends declared in respect of (2) but not yet paid	36,500 00
5. (e) Unappropriated profits in respect of (2)	42,743 14
6. (f) Reserve fund in respect of (2)	608,333 28

Special reserve fund to provide premium for optional redemption of debenture stock	13,447 64
--	-----------

\$1,431,024 06

C.—Liabilities to Stockholders or Shareholders other than already shown under A. or B., viz.:

24. Unclaimed dividends	401 01
-------------------------------	--------

Liabilities to the Public.

31. Debentures and deposit receipts issued elsewhere than in Canada.	1,450,334 85
35. Debenture stock issued elsewhere than in Canada	1,466,803 58
40. Other liabilities to the public, viz:	
41. (a) Unclaimed interest, etc., Aberdeen	191 85
42. (b) Accruing income tax, Aberdeen, not yet due	10,915 00
Amount provided for expenses at Aberdeen not yet ascertained	1,946 68
do. do. do. at Toronto	1,875 00
	2,932,066 96
Total liabilities	\$4,363,492 03

Cr.

Assets

I—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:	
2. (i) At Aberdeen, Scotland, held in freehold	\$63,266 66

\$63,266 66

B.—Debts secured by mortgages of land.

9. (a) Debts (other than item 10) secured by mortgages of land (Principal)	3,988,300 20	
10. (b) Debts secured by mortgaged land held for sale (Principal) ..	8,228 48	
11. (c) Interest due or accrued on item 9 and not included therein ..	170,305 27	4,166,833 96
12. (d) Of the debts mentioned in item 9, the sum of \$29,879.00, due by directors or officers of the Corporation. (Not extended).		
C.—Debts not above enumerated for which the Corporation holds securities as follows:		

14. (b) Debts secured by municipal bonds or debentures	103,298 76	
15. (c) Debts secured by public school debentures		
26. (n) Interest due or accrued on items 14 and 15 and not included therein	3,119 09	106,417 85

E.—Cash.

32. (b) In banks		25,567 47
F.—Assets not hereinbefore mentioned.		
37. (a) Office furniture	973 33	
38. (b) Rent charges paid applicable to next year, Aberdeen	195 27	
39. (c) Rent overdue, Toronto	237 50	1,406 10
Total assets		\$4,363,492 03

CASH ACCOUNT.

Receipts for the year ending 11th November, 1904, in Ontario only.

I.—Received by the Corporation for its Own Use

2. (ii) In bank	(Col. 1.)	(Col. 4.)
		\$19,704 08
C.—Receipts on Account of Investments, Loans or Debts.		
(a) On mortgages of realty:		
10. (i) Principal	\$216,980 32	
11. (ii) Interest, including item 13	66,372 65	
(b) On other securities:		
12. (i) Principal	168,710 30	462,063 27
D.—Receipts of real estate beneficially owned by Corporation.		
16. (a) Sales	146,000 00	
17. (b) Rents	8,158 73	164,158 73

E.—Miscellaneous.

19. (b) Premium or bonus on loans		275 55
---	--	--------

G.—Receipts from other sources, etc.

30. (a) Received from Head Office, Scotland	15,729 35	
(b) Received from Branch Office in Manitoba	52,098 59	
(c) Exchange	166 66	
		67,994 60
Totals		\$694,196 23

Expenditure for the year ending 11th November, 1904, in Ontario only.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.		
	(Col. 1.)	(Col. 4.)
1. (a) Loaned on mortgages of realty	\$166,025 58	
(b) Loaned or invested in other securities, viz.:		
3. (ii) Bonds and stocks	142,197 93	
(e) Insurance or taxes advanced on property mortgaged to the Corporation	3,165 60	311,389 11

D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	9,940 00	
26. (b) Commission or brokerage	110 00	
28. (d) Stationery, postage, printing and advertising	540 68	
29. (e) Law costs	132 50	
30. (f) Rent	1,500 00	
31. (g) Travelling expenses	62 86	
32. (h) Registration fees	205 00	
		12,496 94
E.—Other Expenditure, viz.:		
34. (a) Transmitted to Head Office, Scotland	228,210 11	
35. (b) " branch in Manitoba	120,988 75	
36. (c) Current expenditure on Company's building	4,692 86	
(d) Exchange, \$53.47; income tax,, \$549.80	603 27	
		354,500 99
F.—Balances.		
37. (b) Cash in bank		15,809 19
Totals		\$694,196 23

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of Debentures issued by the Corporation in Canada which will mature in 1905, none.
2. Amount of Debentures and deposit receipts issued by the Corporation elsewhere which will mature in 1905, \$433,016.00.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$453,939.00.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits and debentures, about 3.60 per cent.; on debenture stock, about 3.90 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty on other securities, 6.89 per cent.
7. Of the mortgages held by the Corporation \$1,083,238.94 is on realty situate in Ontario, and \$2,905,061.26 is on realty situate elsewhere.
8. Loans transferred to real estate account during 1904, (3) \$1,357.00.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904, No. 19, amount, \$15,525.
10. How often are the securities held by the Corporation valued? Book value made annually, land securities being valued continuously.
12. (a) What officers of the Corporation are under bond, and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? 11th November, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed): William Milne, Chartered accountant, and Messrs. James Meston & Co., Chartered accountants, Aberdeen, Scotland.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 30th June and 30th December. 5 per cent. on both dates. 10 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 27th December, 1904.
17. Date of last Annual Meeting? 26th December, 1903.

THE ONTARIO BUILDING AND SAVINGS SOCIETY.

Head Office, Kingston, Ont.

Incorporated under the Building Societies Act, Consol. Stat. U.C., chap. 63, by declaration filed with the Clerk of the Peace for the County of Frontenac, on the 26th June, 1874.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Ontario Building and Savings Society, of Kingston, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at 67 Clarence Street, in the City of Kingston, in the Province of Ontario.

*The Board is constituted of eight directors holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

C. V. Price, President, Kingston; 18th March, 1903; 15th March, 1905.

Richard Waldron, Vice-Pres., Kingston; 16th " 1904; 21st " 1906.

Benjamin W. Folger, Director, Kingston; 18th " 1903; 15th " 1905.

Hon. Mr. Justice Britton, Dir., Toronto; 16th " 1904; 21st " 1906.

James McArthur, Director, Kingston; " "

Leonard Clements, Director, Kingston; " "

James McArthur, Manager-Secretary, Kingston; 17th July, 1874.

A. Permanent capital stock: Total amount authorized, \$250,000; total amount subscribed, \$250,000, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at December 31st, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.			
2. Fully paid.....	5,000	\$50	\$250,000	\$250,000	nil.

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called: total called, \$250,000; total paid thereon	\$250,000 00	
4. (d) Dividends declared in respect of (1), but not yet paid	6,250 00	
7. (g) Contingent fund, in respect of (1)	26,946 59	
		\$283,196 59

Liabilities to the Public.

27. Deposits (including unclaimed deposits) payable on demand.....	155,842 21	
28. Interest on deposits, due or accrued or capitalised (included in 27).		
39. Due on loans in process of completion or to pay assumed mortgages	1,400 00	
40. Other liabilities to the public, viz.:		
41. (a) Open account	276 38	
		157,518 59

Total liabilities \$440,715 18

*One director deceased and one resigned.
†30 days notice can be required.

BALANCE SHEET.—Continued.

Cr.	Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property Owned Beneficially by Corporation.		
5. (b) Freehold land (including buildings)		\$4,246 30
B.—Debts secured by mortgages of land.		
9. (a) Debts (other than item 10) secured by mortgages of land	\$281,621 55	
10. (b) Debts secured by mortgaged land held for sale	2,360 00	
(bb) Debts secured by land held by the Company as mortgagee in possession, or secured by land for the rents and profits of which the Company is accountable	2,349 78	
11. (c) Interest due and accrued on items 9 and 10 and not included therein	7,168 92	
		293,500 25
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
20. (h) Debts secured only by permanent stock or shares of the Corporation	4,621 15	
22. (j) Debts secured by Electric Railway debentures	4,698 70	
		9,319 85
D.—Unsecured Debts.		
27. (a) Debts not at present collectable, taxes, insurance, premiums, etc.		768 32
E.—Cash.		
31. (a) On hand	38 65	
32. (b) In bank	91,760 47	
		91,799 12
F.—Assets not hereinbefore mentioned.		
37. (a) Office furniture	86 57	
38. (b) City of Kingston debentures	26,615 44	
39. (c) Bonds Kingston Light, Heat and Power Company	14,264 06	
40. (d) Interest accruing on (39)	115 27	
		41,081 34
Total assets		\$440,715 18

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.			
Balance from 31st December, 1903.			
	(Col. 1.)	(Total Col. 4)	
(i) On hand		\$18 39	
3 (ii) In bank		102,024 07	
(iii) Bank interest		3,243 31	
C.—Receipts on account of Investments, Loans or Debts			
(a) On mortgages of realty:—			
10. (i) Principal	55,786 41		
11. (ii) Interest			
(b) On other securities:—			
12. (i) Principal	29,253 05		
13. (ii) Interest or dividends			
		85,039 46	
E.—Miscellaneous.			
19. (b) Premium or bonus on loans included in Nos. 10 and 11.			
F.—Borrowed Money.			
26. (b) Borrowed by taking deposits		239,484 11	
G.—Receipts from other sources.			
30. (a) Fees		9 50	
Totals		\$429,818 54	

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		
	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty including item 7 (e)		\$39,906 84
(b) Loaned or invested in other securities, viz.:		
(1) Loans on stock of this Society		26,550 00
7. (c) Insurance or taxes advanced on property mortgaged to the Corporation. Included in 1 (a).		
B.—Expended on Stock Account.		
8. Dividends paid on permanent stock	\$11,334 00	11,334 00
C.—Borrowed Money (other than the foregoing) or Interest thereon Paid, viz.:		
19. (b) Deposits: Principal, including interest		257,422 02
D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	2,172 00	
26. (b) Commission or brokerage	126 50	
28. (d) Stationery, postage, printing and advertising	84 28	
29. (e) Law costs	10 00	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	163 37	
31. (g) Travelling expenses	4 60	
32. (h) Registration fees	55 00	
(i) Provincial tax	162 50	
Sundries	12 26	
		2,790 51
E.—Other Expenditures, viz.:		
34. (a) Taxes on real estate		16 35
F.—Balance.		
37. (a) Cash on hand and in bank		91,799 12
Totals		\$429,818 74

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of Debentures issued by the Corporation in Canada which will mature in 1905, none.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, none.
3. Amount of other existing obligations of the Corporation which will mature in 1905, none.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, none.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3 per cent.; on debentures, none; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5 to 6 per cent; on other securities, 4 to 6 per cent.
7. Of the mortgages held by the Corporation, all are on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904, \$97.56 (included in sums formerly deducted from Contingent Fund, and set apart to close mortgages on which the exact loss had not then been fully ascertained).
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, \$526,500.
11. How often are the securities held by the Corporation valued? From time to time as occasion arises.
12. (a) What officers of the Corporation are under bond, and for what sum respectively? Manager, \$2,000; Assistant Manager, \$1,500. By private sureties.
13. When were the accounts of the Corporation last audited? 17th February, 1903, to 31st December, 1904.
14. Names and addresses of auditors for 1904: Samuel Harper and David A. Givens, Kingston; for 1905, not yet appointed.
15. What were the dividend-days of the Corporation in 1904 and what rate or rates of dividends were paid on those days respectively? 4th January, 2 per cent.; 5th July, 2 1-2 per cent.
16. What is the date appointed for the Annual Meeting? Third Wednesday in March each year. 15th March, 1905.
17. Date of last Annual Meeting? 16th March, 1904.

THE ONTARIO LOAN AND DEBENTURE COMPANY.

Head Office, London, Ontario.

Incorporated under Building Societies Act Con. Statutes of Upper Canada, Chap. 53 by declaration filed in the Office of the Clerk of the Peace for the County of Middlesex, 26th September, 1870. The original corporate name was The Ontario Savings and Investment Society.

By Order in Council of Ontario, dated 4th October, 1879, and also by Order in Council of Canada, dated 29th October, 1879, the corporate name was changed to The Ontario Loan and Debenture Company.

The lending and borrowing powers are governed by the Loan Corporations Act, R. S. O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The Ontario Loan and Debenture Company, of London, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the Laws of the said Province.

The head office of the Corporation is at No. 139 Dundas street, in the City of London, in the Province of Ontario.

The Board is constituted of five directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:—

John McClary, President, London, Ont.; 10th February, 1904; 18th February, 1905.
 Arthur S. Emery, Vice-President, London, Ont. " "
 Wm. Bowman, Director, London, Ont. " "
 John M. Dillon, Director, London, Ont. " "
 Lt.-Col. W. M. Gartshore, Director, London, Ont. " "
 Wm. F. Bullen, Manager and Secretary-Treasurer, London, Ont., 14th July, 1871.

A. Permanent capital stock: Total amount authorized, not limited; total amount subscribed, \$2,000,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.	—		
		\$	\$	\$	\$
1. Fully called.....	20,000	50	1,000,000	1,000,000 00	
2. Partly ".....	20,000	50	1,000,000	200,000 00	800,000
Totals.....	40,000		2,000,000	1,200,000 00	800,000

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$1,000,000; total paid thereon	\$1,000,000 00	
2. (b) Ordinary joint stock capital, 20 per cent. called; total called, \$200,000; total paid thereon	200,000 00	
4. (d) Dividends declared in respect of (1) and (2), but not yet paid..	36,000 00	
5. (e) Unappropriated profits in respect of (1) and (2)	32,161 06	
6. (f) Reserve fund in respect of (1) and (2)	625,000 00	
		\$1,893,161 06

Liabilities to the Public.

27. Deposits (including unclaimed deposits) payable on notice	\$525,097 01	
28. Interest on deposits, capitalized during year	\$16,663.30	
29. Debentures issued and payable in Canada	455,738 00	
30. Interest due and accrued on (29)	7,385 53	
31. Debentures issued in Canada and payable elsewhere	1,026,088 67	
32. Interest due and accrued on (31)	9,447 86	
40. Other liabilities to the public, viz.:		
41. (a) Accrued commissions	10,000 00	
		2,033,767 07
Total Liabilities		\$3,926,918 13

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the Corporation.

1. (a) Office premises situate as follows:—		
2. (i) At London, Ont., held in freehold	\$40,000 00	\$40,000 00

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	3,661,795 10	3,661,795 10
---	--------------	--------------

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Debts secured by municipal bonds or debentures	91,520 80	
20. (h) Debts secured only by permanent stock or shares of the Corporation	5,099 68	
22. (j) Debts secured by Chartered Bank stock	6,025 00	
23. (k) Debts secured by Life Assurance Coy. policies	7,372 73	
24. (l) Gas Company stock	1,000 00	
		111,018 21

E.—Cash.

32. (b) In banks	\$114,104 82	114,104 82
------------------------	--------------	------------

Total assets		\$3,926,918 13
--------------------	--	----------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

3. (a) Cash (not already shown under (1)) :—		
(i) In bank		\$52,152 81

D.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—		
10. (i) Principal	\$667,803 82	
11. (ii) Interest	191,516 94	
(b) On other securities:—		
12. (i) Principal	52,954 22	
13. (ii) Interest or dividends	4,874 53	
		917,149 51

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rents	\$1,084 28	1,084 28
---------------------	------------	----------

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	620,479 51	
27. (c) Borrowed on debentures	345,626 31	
		966,105 82

G.—Receipts from other sources.

30. (a) Interest on bank accounts		1,381 39
---	--	----------

Totals		\$1,937,873 81
--------------	--	----------------

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	\$720,857 00	
(b) Loaned or invested in other securities, viz.:—		
2. (i) The Company's stock	45,150 00	
3. (ii) Life assurance company's policies	120 74	
		\$766,127 74

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$72,000 00	72,000 00
--	-------------	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits: Principal, \$689,562.06; interest, \$512.90	\$690,074 96	
20. (c) Debentures issued and payable in Canada: Principal, \$145,776.66; interest, \$16,042.35	161,819 01	
21. (d) Debentures issued in Canada and payable elsewhere: Principal, \$69,787.99; interest, \$35,761.43	105,549 42	
		957,443 39

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$10,660 73	
26. (b) Commission or brokerage	7,576 55	
28. (d) Stationery, postage, printing, advertising, etc.	1,393 97	
30. (f) Taxes (other than in 7 and 32) and rates	3,346 86	
31. (g) Travelling expenses (including inspectors' salaries)	5,019 75	
32. (h) Registration fees	200 00	
		28,197 86

F.—Balance.

37. (a) Cash in bank		114,104 82
Total		\$1,937,873 81

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation and payable in Canada which will mature in 1905, \$149,456.00.
2. Amount of debentures issued by the Corporation in Canada and payable elsewhere which will mature in 1905, \$274,115.00.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$417,027.80.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3.141C per cent.; on debentures, 3.8111 per cent.; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.5367 per cent.; on other securities, 4.2136.
7. Of the mortgages held by the Corporation, \$2,496,558.83, is on realty situate in Ontario, and \$1,165,206.27, is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, none.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 2; amount, \$4,541.09.
10. Aggregate market value of the land mortgaged to the Corporation, \$6,951,298.
11. How often are the securities held by the Corporation valued? Semi-annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$5,000; 2 Inspectors, \$2,000 each; accountant, \$5,000; teller, \$5,000; 2 clerks, \$2,000 each; 3 clerks, \$1,000 each. By Guarantee Company.
13. When were the accounts of the Corporation last audited? January 23rd, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: Geo. F. Jewell, F.C.A., London, Ont.; A. M. Smart, London, Ont. For 1905: Geo. F. Jewell, F. C. A., and A. M. Smart, London, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January, 1904—3 per cent. per half year; 2nd July, 1904—3 per cent. per half year.
16. What is the date appointed for the Annual Meeting? Second Wednesday in each February.
17. Date of last Annual Meeting 8th February, 1905.

THE ONTARIO LOAN AND SAVINGS COMPANY.

Head Office, Oshawa.

Incorporated under the Building Societies Acts, Consol. Stat. U. C., chap. 53, by declaration filed with the Clerk of the Peace for the County of Ontario on 12th February, 1873.

The lending and the borrowing powers are governed by the Loan Corporations Act, R. S. O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Ontario Loan and Savings Company, of Oshawa, Ontario at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is in the Town of Oshawa, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

W. F. Cowan, President, Oshawa;	18th February, 1904,	15th February, 1905.
W. F. Allan, Vice-President, Bowmanville;	"	"
John Cowan, Director, Oshawa;	"	"
R. S. Hamlin, Director, Oshawa;	"	"
Thomas Paterson, Director, Bowmanville;	"	"
Wm. Brien, Director, Trillick, Ireland;	"	"
James A. Gibson, Director, Oshawa;	"	"
T. H. McMillan, Manager-Secretary, Oshawa;	"	"

A. Permanent capital stock: Total amount authorized, \$300,000; total amount subscribed, \$300,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Societies Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value.	—		
		\$ c.	\$ c.	\$ c.	\$ c.
Fully called.....	6,000	50 00	300,000 00	300,000 00	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary capital fully called; total called, \$300,000; total paid thereon	\$300,000 00	
6. (f) Reserve fund in respect of (1)	75,000 00	
7. (g) Contingent fund in respect of (1)	25,000 00	
		\$400,000 00

Liabilities to the Public.

27. Deposits payable on notice	\$326,473 79	
29. Debentures issued in Canada	253,000 00	
		579,473 79
Total liabilities		\$979,473 79

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

1 (a) Office premises situate as follows:—

2. (i) At Oshawa	\$11,000 00	
5. (b) Freehold land (including buildings) other than foregoing	15,000 00	
		\$26,000 00

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$772,894 06	
10. (b) Debts secured by mortgaged land held for sale	20,000 00	
		792,894 06

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	\$8,957 58	8,957 58
--	------------	----------

E.—Cash.

31. (a) On hand	\$266 97	
32. (b) In banks	118,882 38	
		119,149 35

F.—Assets not hereinbefore Mentioned.

37. (a) 139 shares Western Bank Stock and accrued dividend	\$19,460 00	
38. (b) 212 shares Ontario Loan and Savings Co.'s Stock held in trust	12,612 80	
39. (c) Office furniture, safes, etc.	400 00	
		32,472 80
Total assets		\$979,473 79

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

1. (a) Capital Account	(Col. 1.) \$558 15	(Total Col. 4.)
(b) Cash (not already shown under (1)):		
2. (i) On hand	721 76	
3. (ii) In bank	16,186 57	
		\$17,466 48

D.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—		
10. (i) Principal	\$71,947 40	
11. (ii) Interest, etc.	36,569 13	
(b) On other securities:—		
13. (ii) Interest and dividends	3,792 00	
		112,308 53

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	\$215,076 58	
27. (c) Borrowed on debentures	200,000 00	
		415,076 58
Totals		\$544,851 59

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty	\$38,113 55	
(b) Loaned or invested in other securities:—		
2. (i) Companies shares	2,400 00	\$40,513 55

B.—Expended on Stock Account.

8. Dividends paid on premium stock	\$14,986 04	14,986 04
--	-------------	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits: Principal, \$192,664.98; interest, \$11,570.13	204,235 11	
20. (c) Debentures issued in Canada: Principal, \$200,000; interest, \$10,120.00	210,120 00	414,355 11

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$4,825 00	
26. (b) Commission or brokerage	100 00	
28. (d) Stationery, postage, printing and advertising	300 00	
29. (e) Law costs	75 00	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	272 54	
32. (h) Registration fee	275 00	5,847 54

F.—Balance.

37. (a) Cash on hand and in banks	69,149 35	
Totals	\$544,851 59	

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the corporation in Canada which will mature in 1905, \$8,000.
2. Amount of debentures issued by the corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the corporation which will mature in 1905. None, except deposits.
4. Amount of securities held by the corporation which will mature and become payable to the corporation in 1905. About \$55,000.00.
5. Average rate of interest per annum paid by the corporation during 1904. On deposits $3\frac{1}{2}$ per cent.; on debentures, about 4 per cent.; on debenture stock, none.
6. Average rate of interest per annum received by the corporation during 1904. On mortgages of realty, about $5\frac{1}{2}$ per cent.; on other securities, $5\frac{1}{2}$ per cent.
7. Of the mortgages held by the corporation \$792,894.06 is on realty situate in Ontario, and \$ is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. \$806.56.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the corporation in 1904. No. 2; amount about \$4,000.
10. Aggregate market value of land mortgaged to the corporation. Say \$1,750,000, cannot say accurately.
11. How often are the securities held by the corporation valued? Once a year.
12. (a) What officers of the corporation are under bond and for what sum respectively? Accountant and teller, \$2,500 each. By Guarantee Company.
13. When were the accounts of the corporation last audited? Up to 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905. For 1904, J. P. Owens and P. H. Punshon, Oshawa.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 1st July and 1st January. Dividends at rate of 5 per cent. per annum.
16. What is the date appointed for the Annual Meeting? Third Wednesday of every month of February.
17. Date of last Annual Meeting? 15th February, 1905.

THE OXFORD PERMANENT LOAN AND SAVINGS SOCIETY.

Head Office, Woodstock, Ont.

Incorporated under the Building Societies' Act, Consol. Stat. U. C., chapter 53, by declaration filed with the Clerk of the Peace for the County of Oxford, on the 27th October, 1865. (Decl. Book I, 25). The original corporate name was "The Oxford Permanent Building and Saving Society."

By Order in Council of Ontario, dated 23rd September, 1878, the corporate name was changed to the Oxford Permanent Loan and Savings Society.

The borrowing and the lending powers are governed by the Loan Corporations Act, R.S.O., 1897, c. 205.

A by-law altering the amount of the capital stock was, pursuant to the Loan Corporations Act, approved by Order-in-Council, 27th May, 1905.

ANNUAL STATEMENT

Of the condition and affairs of the Oxford Permanent Loan and Savings Society, of Woodstock, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 388 Dundas Street, in the City of Woodstock, in the Province of Ontario.

The Board is constituted of eight directors, holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

James White, President, Woodstock, 26th February, 1903; 23rd February, 1905.
 Judge Finkle, Vice-President, Woodstock, 25th February, 1904; 22nd February, 1906.
 William Dease, Director, Woodstock, 25th February 1904; 22nd February, 1906.
 H. P. Brown, Director, Woodstock, 25th February, 1904; 22nd February, 1906.
 John White, Director, Woodstock, 25th February 1904; 22nd February, 1906.
 Thos. H. Parker, Director, Woodstock, 26th February 1903; 23rd February, 1905.
 * William Grey, Director, Woodstock 26th February, 1903; 23rd February 1905.
 M. Douglas, Manager and Secretary, Woodstock, 26th Feb. 1903; 23rd Feb. 1905.

A. Permanent capital stock: Total amount authorized, \$270,000; total amount subscribed, \$270,000, as more particularly set out in Schedule A hereto:

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value.			
		\$	\$	\$	\$
1. Fully called	4,684	50	234,200	234,200	
2. Partly called, 20 per cent.	716	50	35,800	7,160	19,320
3. Paid in advance of calls				9,320	
Totals	5,400		270,000	250,680	19,320

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$234,200; total paid thereon	\$234,200 00
2. (b) Ordinary joint stock capital, 20 per cent. called; total called, \$7,160; total paid thereon	7,160 00
3. (cc) Joint stock capital paid in advance of calls	9,320 00
4. (d) Dividends declared in respect of (1) and (2), but not yet paid ..	7,531 99
6. (f) Reserve fund in respect of (1) and (2)	50,000 00
7. (g) Contingent fund in respect of (1) and (2)	4,500 00
	\$312,711 99

* Deceased.

Liabilities to the Public.

27. Deposits (including unclaimed deposits)	\$307,658 63	
29. Debentures issued in Canada	264,632 00	
30. Interest due and accrued on (29)	7,725 54	
40. Other liabilities to the public, viz.:		
41. (a) Sundry accounts and balances	252 92	
		580,269 09
Total liabilities		\$892,981 08

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the Corporation.

1. (a) Office premises situate as follows:—		
2. (i) At Woodstock, held in freehold		\$6,500 00

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$788,801 33	
10. (b) Debts secured by mortgaged land held for sale	494 75	
		789,296 08

C.—Debts not above enumerated for which the Corporation holds security as follows:

14. (b) Debts secured by municipal bonds or debentures	\$12,938 73	
16. (d) Debts secured by Loan Corporation's debentures	16,118 72	
20. (h) Debts secured only by permanent stock or shares of the Corporation	7,520 84	
22. (j) Debts secured by permanent stock of other Loan Corporations	38,803 33	
23. (k) Debts secured by cash value of insurance policy	765 62	
		76,147 24

D.—Unsecured Debts.

27. (a) Rents office building		195 61
-------------------------------------	--	--------

E.—Cash.

31. (a) On hand	\$1,918 46	
32. (b) In banks	18,923 69	
		20,842 15

Total assets		\$892,981 08
--------------------	--	--------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

Balance from 31st December, 1903.

	(Col. 1.)	(Col. 3.)	(Total Col. 4.)
(a) Cash (not already shown under (1)) :—			
2. (i) On hand	\$968 02		\$968 02
B.—Sums received wholly or partly on Capital Stock.			
4. (a) Joint stock capital received in advance of calls		\$9,320 00	
5. (b) Premiums on (4)		2,042 50	
			11,362 50

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—			
10. (i) Principal	\$65,588 77		
11. (ii) Interest	35,022 35		
(iii) Instalments	2,148 82		
(b) On other securities :—			
12. (i) Principal	57,035 88		
13. (ii) Interest or dividends	3,900 00		
			163,695 82

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rents	\$530 47		530 47
---------------------	----------	--	--------

E.—Miscellaneous.

18. (a) Commission, brokerage, etc.	2 00		2 00
--	------	--	------

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	\$431,819 48		
27. (c) Borrowed on debentures	91,717 00		
			523,536 48

G.—Receipts from other sources.

30. (a) Mortgage account—Insurance	\$1,284 20		
(b) Solicitors' fees and sundry receipts	55 90		
(c) Bank interest	127 10		
			1,467 10

Totals			\$701,562 39
--------------	--	--	--------------

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	\$123,837 35	
2. (b) Loaned or invested in other securities, viz. —		
3. (i) On capital stock of this Corporation	1,693 37	
3. (ii) On debentures of this Corporation	5,937 00	
4. (iii) On municipal debentures	7,000 00	
(e) Insurance or taxes advanced on property mortgaged to the Corporation	1,104 35	\$139,572 07

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$14,490 60	14,490 60
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:		
18. (a) Bank account, interest	1,857 18	
19. (b) Deposits: Principal, \$435,004.39; interest, \$284.56	435,288 95	
20. (c) Debentures payable in Canada: Principal, \$75,530.00; interest, \$9,595.28	85,125 28	522,271 41

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$2,722 00	
26. (b) Commission or brokerage	522 62	
28. (d) Stationery, postage, printing and advertising	203 55	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	685 82	
32. (h) Registration fees	80 00	4,213 99

E.—Other Expenditures, viz.:

33. (a) Improvement to office	\$118 77	
34. (b) Mortgage account—solicitors' fees and sundry payments	53 40	172 17

F.—Balance.

37. (a) Cash on hand and in banks		20,842 15
Totals		\$701,562 39

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$98,330.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$126,577.09.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3.50 per cent.; on debentures 4.014 per cent.; on debenture stock. None.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 5.292 per cent. On other securities 4.097, per cent.
7. Of the mortgages held by the Corporation, \$789,296.08 is on realty situate in Ontario, and none on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and amount of mortgages upon which compulsory proceeding have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation. \$1,469,505.00.
11. How often are the securities held by the Corporation valued? Half yearly by the Manager, yearly by the Directors.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Treasurer, \$10,000, and ledger-keeper, \$2,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? As at 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed)? For 1904, W. H. VanIngen, James Canfield, Woodstock, Ontario.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January and 2nd July—6 per cent. per annum.
16. What is the date appointed for the Annual Meeting? Fourth Thursday in February.
17. Date of last Annual Meeting? 25th February, 1904.

THE REAL ESTATE LOAN COMPANY OF CANADA, LIMITED.

Head Office, Toronto, Ontario.

CONSTATING INSTRUMENTS.

Incorporated under the Building Society's Act, (R. S. O. 1867, c. 164) by declaration filed with the Clerk of the Peace for the County of York, 17th September, 1879, with the corporate name of the Real Estate Loan and Debenture Company.—Decl. Book II. p. 57.

Letters Patent of Canada (6th April, 1883) incorporating the Company under the Canada Joint Stock Companies' Act, 1877, with the corporate name of the Real Estate Loan Company of Canada, Limited.—Lib. 85, folio 282, Office of the Registrar-General of Canada. The capital authorized by this instrument was "\$2,000,000, being the capital of the said the Real Estate Loan and Debenture Company, with the same powers throughout Canada as now possessed by the said the Real Estate Loan and Debenture Company, and for the same purposes and objects, subject always to the provisions of the said last mentioned Act (Canada J. S. Co's Act, 1877) and with all such further powers, purposes and objects as are conferred upon loan companies incorporated under the provisions of the said last mentioned Act."

1884. Act of the Dominion of Canada, 47 V. c. 101 (D), respecting sales of assets.

Supplementary Letters Patent of Canada (20th June, 1892) reciting By-law No. 62 of the Company, and (as therein provided) reducing the capital stock from \$2,000,000 to \$1,600,000.

ANNUAL STATEMENT

Of the condition and affairs of the Real Estate Loan Company of Canada, (Limited), at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 2 Toronto street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of five directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

William Cooke, President, Toronto,	3rd February, 1904,	1st February, 1905.
M. H. Aikins, M.D., Vice-President, Burnhamthorpe,	"	"
R. C. Moffatt, D.D., Director, Toronto,	"	"
G. Martin Rae,	"	"
E. Douglas Armour K.C., Director, Toronto,	"	"
E. L. Morton, Manager, Toronto,	"	"

A. Permanent capital stock: Total amount authorized, \$1,600,000; total amount subscribed, \$373,720, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies' Acts or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
Fully called.....	9,343	\$ 40	\$ 373,720	\$ 373,720	\$

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$373,720; total paid thereon	\$373,720 00	
4. (d) Dividends declared in respect of (1), but not yet paid	11,305 00	
5. (e) Unappropriated profits in respect of (1)	6,464 81	
6. (f) Reserve fund in respect of (1)	60,000 00	
7. (g) Contingent fund in respect of (1)	10,000 00	
		\$461,489 81

Liabilities to the Public.

27. Unclaimed deposits	\$257 33	
29. Debentures issued in Canada	63,276 71	
30. Interest due and accrued on (29)	981 91	
31. Debentures issued elsewhere than in Canada	25,962 25	
32. Interest due and accrued	155 50	
		90,633 70
Total liabilities		\$552,123 51

Or.

Assets.

I.—Assets of which the Company is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

5. (b) Freehold land (including buildings) other than foregoing	\$13,386 05	\$13,386 05
--	-------------	-------------

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	511,954 96	
10. (b) Debts secured by mortgaged land held for sale	5,463 01	
		517,417 97

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	\$2,236 24	2,236 24
--	------------	----------

E.—Cash.

32. (b) In banks		19,083 25
Total assets		\$552,123 51

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(b) Cash (not already shown under (1)) :—	(Col. 1.)	(Total Col. 4.)
2. (i) On hand		\$10 00
3. (ii) In bank		3,688 88

C.—Receipts on account of Investments, Loans or Debts.

(a) Mortgages of realty :—		
10. (i) Principal		103,989 89
11. (ii) Interest	\$35,039 12	35,039 12

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rents		659 12
---------------------	--	--------

F.—Borrowed Money.

25. (a) Bank or other advances, discounts or overdrafts		30,000 00
27. (e) Borrowed on debentures		57,377 25
Totals		\$223,764 26

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		(Total Col. 4.)
1. (a) Loaned on mortgages of realty		\$224,451 28
7. (d) Incumbrances on realty paid off		250 00
(e) Insurance and taxes advanced on property mortgaged to the Corporation..		597 24
B.—Expended on Stock Account.		
8. Dividends paid on permanent stock	\$18,686.00	18,686 00
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:		
18. (a) Bank account (principal and interest)		30,948 60
20. (c) Debentures issued in Canada: Principal, \$20,615; interest, \$2,704.30		23,319 30
D.—Management Expenses (other than foregoing).		
25. (a) Salaries and fees		3,773 35
26. (b) Commission or brokerage and inspection		518 44
28. (d) Stationery, postage, printing, advertising and sundries		601 68
29. (e) Law costs		29 85
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates		890 70
32. (h) Registration fees		75 00
33. (i) Other management expenditure		48 59
E.—Other Expenditure, viz.:		
34. (a) Unclaimed dividends		491 00
F.—Balance.		
37. (a) Cash in bank		19,083 25
Total		\$223,764 26

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$28,558.83.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. Mortgages, \$112,250.
5. Average rate of interest per annum paid by the Corporation during 1904; on deposits, none; on debentures, 4½ per cent. on Currency and 4 per cent. on Sterling; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 6.9 per cent.; on other securities, 5½ per cent.
7. Of the mortgages held by the Corporation \$412,400 is on realty situate in Ontario, and \$465,580 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1903. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 5; amount, \$5,600.00.
10. Aggregate market value of the land mortgaged to the Corporation. Estimated at \$1,076,000.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager and agent at Winnipeg, Man., \$5,000, each. By Guarantee Company.
13. When were the accounts of the Corporation last audited? 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905. For 1904, J. C. Copp, Toronto; T. E. P. Trew, Toronto; S. W. Black, Toronto. For 1905, S. W. Black, Toronto; T. E. P. Trew, Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January, 2½ per cent., 2nd July, 2½ per cent.
16. What is the date appointed for the Annual Meeting? Each first Wednesday in February.
17. Date of last Annual Meeting? 3rd February, 1904.

THE ROYAL LOAN AND SAVINGS COMPANY.

Head Office, Brantford, Ontario.

Incorporated under the Building Societies Act, (Consol., Stat. U. C., chap. 53) by declaration filed with the Clerk of the Peace for the County of Brant, on the 24th March, 1876. (Decl. Book I, 3).

The lending and the borrowing powers are governed by the Loan Corporations Act, R. S. O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Royal Loan and Savings Company of Brantford, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the corporation is at 138 Dalhousie Street, in the City of Brantford, in the Province of Ontario.

The Board is constituted of six directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Jas. W. Digby, M.D., C.M., President, Brantford; February, 1904, February, 1905.	"	"	"
Christopher Cook, Vice-President,	"	"	"
C. B. Heyd, Director	"	"	"
John Mann,	"	"	"
A. J. Wilkes, K.C. "	"	"	"
Jno. F. McLaren, "	"	"	"
W. G. Helliker, Manager,	"	"	"

A. Permanent capital stock: Total amount authorized, \$500,000; total amount subscribed, \$500,000 as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Societies Act.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payment thereon.	Total Amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.			
1. Fully called.....	10,000	\$ 50	\$ 500,000	\$ 500,000	\$.

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$500,000;	
total paid thereon	\$500,000 00
4. (d) Dividends declared in respect of (1), but not yet paid	15,000 00
6. (f) Reserve fund in respect of (1)	138,000 00
7. (g) Contingent fund in respect of (1)	2,399 53
	<u>\$655,399 53</u>

Liabilities to the Public.

27. Deposits payable on notice	\$372,771 74
28. Interest on deposits, due or accrued or capitalised	459 11
29. Debentures issued in Canada	458,243 17
30. Interest due and accrued on (29)	6,606 08
	<u>838,080 10</u>
Total liabilities	<u>\$1,493,479 63</u>

Cr. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$1,204,070 72
10. (b) Debts secured by mortgaged land held for sale	17,060 14
11. (c) Interest due or accrued on items (9) and (10) and not included therein	18,750 09
	<u>\$1,239,880 95</u>

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Municipal bonds or debentures	\$89,691 05
20. (h) Debts secured only by permanent stock of shares of the Corporation	3,064 88
23. (k) Debts secured by stock and debentures	82,108 69
25. (m) Stocks owned by Company	13,161 25
	<u>188,025 87</u>

E.—Cash.

31. (a) On hand	\$3,346 32
32. (b) In banks	61,376 49
	<u>64,722 81</u>

F.—Assets not hereinbefore mentioned.

33. (b) Office furniture and fixtures	850 00
Total assets	<u>\$1,493,479 63</u>

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

2. (i) On hand	(Total Cdl. 4.)
3. (ii) In bank	\$3,491 78
	<u>13,491 00</u>

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—	
10. (i) Principal	240,317 85
11. (ii) Interest	62,706 05
(b) On other securities:—	
12. (i) Principal	176,706 94
13. (ii) Interest or dividends	15,177 04

D.—Receipts from Real Estate owned Beneficially by Corporation.

Added to Contingent Account Surplus on Sales of Property	1,972 89
16. (a) Sales (not included in any of foregoing items)	26,467 73
17. (b) Rents	3,184 90

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	649,358 87
27. (c) Borrowed on debentures	187,424 59

Totals \$1,377,300 38

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.	
A.—Sums Loaned or Invested on Capital Account.	
1. (a) Loaned on mortgages of realty	(Total Col. 4.)
(b) Loaned or invested in other securities:—	\$304,643 38
4. (ii) Loans on stocks or debentures	83,165 88
7. (e) Insurance and taxes advanced on property mortgaged to the Corporation and repairs and alterations to property	1,253 55
B.—Expended on Stock Account.	
8. Dividends paid on permanent stock	27,500 00
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:	
19. (b) Deposits: Principal, \$696,540.91; interest, \$12,814.66	709,355 57
20. (c) Debentures issued in Canada: Principal, \$160,308.75; interest, \$17,211.31	177,520 06
D.—Management Expenses (other than foregoing).	
25. (a) Salaries and fees	3,710 00
26. (b) Commission or brokerage	1,145 53
28. (d) Stationery, postage, printing and advertising	648 18
29. (e) Law costs	327 90
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	1,401 02
32. (h) Registration fees	125 00
E.—Other Expenditures, viz.:	
34. (a) Furniture	350 00
35. (b) Auditors' fees, \$400.00; directors' fees, \$888.00	1,288 00
36. (c) Inspectors' fees, \$51.50; Guarantee Co., \$92.00	143 50
F.—Balance.	
37. (a) Cash on hand and in banks	64,722 81
Totals	\$1,377,360 38

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$215,963.12.
2. Amount of debentures issued by Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations by Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. Estimated at \$274,259.00.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, 3 per cent.; on debentures, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 5.37 per cent.; on other securities, 5.08 per cent.
7. Of the mortgages held by the Corporation \$1,143,028.57, is on realty situate in Ontario, and \$61,042.15, is on realty situated elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the lands mortgaged to the Corporation. \$2,170,754.00.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$10,000; teller, \$1,000; ledgerkeeper, \$1,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? January, 1905, to December, 31st, 1904.
14. Names and addresses of the auditors for 1904 and 1905. For 1904, A. K. Bunnell, C.A., and Wm. Wilkinson, M.A., Brantford. For 1905, A. K. Bunnell, C. A., and F. W. Frank, Brantford.
15. What were the dividend-days of the Corporation in 1904 and what rate or rates of dividend were paid on those days respectively? 2nd July, 1904, 2½ per cent., 3rd January, 1905, 3 per cent.; 5½ per cent. for year.
16. What is the date appointed for the Annual Meeting? Second Wednesday in February.
17. Date of last Annual Meeting? 8th February, 1905.

THE SECURITY LOAN AND SAVINGS COMPANY.

Head Office, St. Catharines, Ont.

Incorporated under the Building Societies' Act (Consol. Stat. U. C., c. 53) by declaration filed with the Clerk of the Peace for the County of Lincoln on the 12th March, 1870. The original corporate name was The Security Permanent Building and Savings Society.

The corporate name was changed to The Security Loan and Savings Company in 1876 by 39 V. c. 64 (D); and also by Order in Council of Ontario, dated 18th August, 1876.

The lending and the borrowing powers of the Company are governed by the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The Security Loan and Savings Company, of St. Catharines, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 25 Ontario Street, in the City of St. Catharines, in the Province of Ontario.

The Board is constituted of seven directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Thomas M. Merritt, President, St. Catharines;	3rd February, 1904;	1st February, 1905
Henry J. Taylor, Vice-President, St. Catharines;	"	"
M. Y. Keating, Director, St. Catharines;	"	"
Edwin Goodman, M.D., Director, St. Catharines;	"	"
Robert Lawrie, Director, St. Catharines;	"	"
Charles A. F. Ball, Director, Niagara;	"	"
E. F. Dwyer, Director, M'g'r. and Sec'y, St. Catharines	"	"

A.—Permanent capital stock: Total amount authorized, \$300,000; total amount subscribed, \$275,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.	—		
1. Fully called	2,750	\$ 100	275,000	\$ 275,000	\$

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$275,000;	
total paid thereon	\$275,000 00
4. (d) Dividends declared in respect of (1), but not yet paid	6,875 00
7. (g) Contingent fund in respect of (1)	9,339 79
	<u>\$291,214 79</u>

Liabilities to the Public.

27. Deposits (including unclaimed deposits) payable on notice	\$313,012 87
28. Interest on deposits, due or accrued or capitalized	4,692 74
29. Debentures issued in Canada	29,182 13
30. Interest due or accrued on (29)	564 48
	<u>347,392 22</u>

Total Liabilities \$638,607 01

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$613,714 94
10. (b) Debts secured by mortgaged land held for sale	14,750 53
	<u>\$628,465 47</u>

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	7,797 91
--	----------

E.—Cash.

32. (b) In bank	2,087 63
-----------------------	----------

F.—Assets not hereinbefore Mentioned.

37. (a) Office furniture	256 00
--------------------------------	--------

Total assets \$638,607 01

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

Balance from 31st December, 1903.

3. (b) Cash (not already shown under (1)) :—	
(ii) In bank	\$51,328 47

C.—Receipts on account of Investment, Loans or Debts.

(a) On mortgages of realty :—	
10. (i) Principal	86,799 78
11. (ii) Interest	28,840 56
(b) On other securities :—	
12. (i) Principal	2,921 00
13. (ii) Interest or dividends	342 73

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	411,243 54
27. (c) Borrowed on debentures	22,450 00

G.—Receipts from other sources, viz.:

30. (a) Interest from bank, current account	145 83
(b) Interest from special deposits	622 14

Totals \$604,694 35

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	\$138,310 07
(b) Loaned or invested in other securities, viz.:—	
2. (i) Shareholders on their stock	4,681 00

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	13,750 00
--	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

18. (a) Bank account, interest	30 65
19. (b) Deposits: Principal, \$413,361.02; interest, \$9,677.37	423,038 39
20. (c) Debentures issued in Canada: Principal, \$16,776.18; interest, \$985.96	17,762 14

D.—Management Expenses (other than foregoing).

25. (a) Salaries and fees	3,448 00
26. (b) Commission or brokerage	405 30
28. (d) Stationery, postage, printing and advertising	185 75
29. (e) Law costs	4 00
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	510 10
31. (g) Travelling expenses	31 10
32. (h) Registration fees, filing fee and tax	258 75

E.—Other Expenditures, viz.:

34. (a) Telephone rent	35 00
35. (b) Guarantee bonds	25 00
36. (c) Land Mortgage Association	10 00
37. (d) Sundry repairs and supplies	10 65
(e) Life insurance premium	110 52

F.—Balance.

37. (a) Cash in bank	2,087 63
Totals	\$604,694 65

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$15,800.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$33,485.11.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, 3.02 per cent.; on debentures 4; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 5.65 per cent.; on other securities, 5.71 per cent.
7. Of the mortgages held by the Corporation, \$628,465.47 is on realty situate in Ontario, and none on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. \$3,000.00.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904, number, 2; amount, \$2,142.00.
10. Aggregate market value of the land mortgaged to the Corporation, estimated, \$1,289,990.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? secretary-treasurer, \$10,000; accountant and teller, \$5,000; assistant, \$2,000; private bond for Secretary-Treasurer, and Assistant, and Guarantee Company for Accountant.
13. When were the accounts of the Corporation last audited? 13th January, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed)? For 1904: Albert Pay and Robert Fowlie, all of St. Catharines, Ontario. For 1905: Robert Fowlie and Albert Pay, of St. Catharines.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd January and 2nd July. 2½ per cent and 2½ per cent. equal to 5 per cent. per annum.
16. What is the date appointed for the Annual Meeting? First Wednesday in February.
17. Date of last Annual Meeting? 3rd February, 1904.

THE SOUTHERN LOAN AND SAVINGS COMPANY.

Head Office, St. Thomas, Ont.

This Company was, under the provisions of The Loan Corporations Act, formed by the amalgamation of The Southern Loan and Savings Company, The South-Western Farmers' and Mechanics' Savings and Loan Society and The Star Loan Company.

The Agreement for the amalgamation of these Companies under the name of The Southern Loan and Savings Company was duly executed by the said several Corporations on the twenty-third day of September, A.D., 1903, and duly ratified by the Shareholders of the said respective Corporations on the seventeenth day of November, A.D. 1903, and was assented to by the Lieutenant-Governor of the Province of Ontario by Order-in-Council dated twenty-fifth day of November, A.D., 1903.

The lending and the borrowing powers are governed by the Loan Corporations Act, R. S. O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Southern Loan and Savings Company, of St. Thomas, Ont., as at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of said Province.

The head office of the Corporation is at No. 366 Talbot street, in the City of St. Thomas, in the Province of Ontario.

The Board is constituted of ten directors holding office for the term of two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Wm. Mickleborough, President, St. Thomas;	4th February, 1904; February, 1906
E. W. Gustin, M.D., Vice-President, St. Thomas;	" 23rd February, 1905
G. K. Crocker, Director, St. Thomas;	" " 1905
J. A. Bell, Director, St. Thomas;	" February, 1906
R. Haight, Director, Union;	" 23rd February, 1905
Donald Turner, Director, Southwold Station;	" February, 1906
R. Kains, M.D., Director, St. Thomas;	" " 1906
M. A. Gilbert, Director, St. Thomas;	" " 1906
S. Weldon, Director, London;	" 23rd February, 1905
C. B. Spohn, Director, St. Thomas;	" " 1905
J. W. Stewart, Manager, St. Thomas;	"

A. Permanent capital stock; total amount authorized, \$908,950.00; total amount subscribed, \$908,950.00, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.			
1. Fully paid.....	17,795	\$ 50	\$ 889,750	\$ 889,750 00	
2. Partly paid.....	384	50	19,200	9,698.62	9,501.38
	18,179		908,950	899,448.62	9,501.38

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not Printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).		
A.—Permanent Capital Stock or Shares.		
1. (a) Ordinary joint stock capital fully called; Total called,		

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.	
A.—Balance from 31st December, 1903.	
(b) Cash (not already shown under (1)):	
2. (i) On hand	\$1,456 04
3. (ii) In bank	35,306 28
B.—Sums received Wholly or Partly on Capital Stock:	
4. (a) Calls on joint stock permanent capital	10,932 25
C.—Receipts on Account of Investments, Loans or Debts.	
(a) On mortgages of realty:—	
10. (i) Principal	369,939 40
11. (ii) Interest	
(b) On other securities:—	
12. (i) Principal	1,560 79
13. (ii) Interest	441 58
(c) Unsecured debts:—	
14. (i) Principal	3,631 50
D.—Receipts from real estate owned beneficially by Corporation.	
16. (a) Sales not included in any of the foregoing items	3,324 59
17. (b) Rents	
E.—Miscellaneous.	
19. (b) Premium or bonus on loans	496 88
F.—Borrowed Money.	
25. (a) Bank or other advances, accounts or overdrafts	44,391 31
26. (b) Borrowed by taking deposits	934,135 32
27. (c) Borrowed on debentures	347,900 00

CASH ACCOUNT.
Receipts—Continued

G.—Receipts from other sources, viz:—	
30. (a) Rents of Company's buildings	1,380 50
(b) Sundries	70 54
Totals	\$1,754,966 98

CASH ACCOUNT.
Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.	
A.—Sums Loaned or Invested on Capital Account.	
1. (a) Loaned on mortgages of realty	\$216,549 11
(b) Loaned or invested in other securities:	
(i) Loan Company debentures	1,225 00
(e) Addition to Company's building	9,603 92
7. (e) Insurance, taxes and other charges advanced on property mortgaged to the Corporation and now held for sale	1,621 23
B.—Expended on Stock Account.	
8. Dividends paid on permanent stock	53,458 66
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:	
18. (a) Bank account (principal and interest) and interest to Trust Company	2,918 25
19. (b) Deposits: Principal, \$1,020,019.83; interest, \$852.56	1,020,872 39
20. (c) Debentures issued in Canada: Principal, \$413,350.00; interest, \$24,339.84	437,689 84
D.—Management Expenses (other than foregoing).	
25. (a) Salaries, wages and fees	6,112 37
26. (b) Commission or brokerage	1,625 09
28. (d) Stationery, postage, printing and advertising	559 91
29. (e) Law costs, conveyancing only	44 88
30. (f) Fuel, rent, taxes (other than in 7 and 32)	982 70
31. (g) Travelling expenses	429 12
32. (h) Registration fees	150 00
33. (i) Other management expenditure	113 61
E.—Other Expenditure, viz.:	
34. (a) Taxes and maintenance of Company's building	964 95
35. (b) Sundries	45 35
Totals	\$1,754,966 98

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

- 1 Amount of Debentures issued by the Corporation in Canada which will mature in 1905, \$392,500.00.
- 2 Amount of Debentures issued by the Corporation elsewhere which will mature in 1905. None.
- 3 Amount of other existing obligations of the Corporation which will mature in 1905. \$50,000.00.
- 4 Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. Including arrears, approximately \$450,000.
- 5 Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.18 per cent.; on debentures, 4 per cent.
- 6 Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5.25 per cent.; on other securities, approximately 5.74 per cent.
- 7 Of the mortgages held by the Corporation \$2,122,312.95 is on realty situate in Ontario, and \$1,097.41 on realty situate elsewhere.
- 8 Loans written off or transferred to real estate account during 1904. None.
- 9 Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. Number 17. Amount \$38,809.10.
- 10 Aggregate market value of the land mortgaged to the Corporation, \$3,744,410.00.
- 11 How often are the securities held by the Corporation valued? Continually under revision.
12. (a) What officers of the Corporation are under bond, and for what sum respectively? Manager, \$12,000; Accountant, \$8,000; Teller, \$8,000; Inspector, \$1,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed.) For 1904: E. H. Caughill and H. T. Gough, St. Thomas. For 1905: Not yet appointed.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 30th June and 31st December at the rate of 6 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 23rd February, 1905.
17. Date of last Annual Meeting? 4th February, 1904, adjourned to 3rd March, 1904.

THE STANDARD LOAN COMPANY.

Head Office, Toronto, Ont.

Incorporated under the Building Societies Act (Consol. Stat. U. C., chap. 53), by declarations filed with the Clerk of the Peace for the County of Wellington, on 14th February, 1873 (Decl. Book II., 133). The original corporate name was "The Orangeville Building and Loan Association," which name was by Order-in-Council of Ontario, dated 19th May, 1898, changed to The Standard Loan Company. By the same Order-in-Council the head office was changed from Orangeville to Toronto.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Standard Loan Company at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 24 Adelaide St. East, in the City of Toronto.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Alexander Sutherland, President, Toronto; 20th February, 1904; 19th February, 1905
 W. S. Dinnick, Vice-President and Manager, Toronto; "
 Hugh S. Brennan, 2nd Vice-President, Hamilton; "
 Thos. B. Puddicombe, Director, Haysville; "
 R. H. Green, Director, Toronto; "
 Lord Strathcona and Mount Royal, London, Eng.; 19th Nov., 1904 "
 Francis Jordan, Director, Goderich; "
 J. M. Roberts, Director, Dungannon, "
 Wm. Proudfoot, K.C., Director, Goderich, "
 W. S. Dinnick, Manager, Toronto. "

A.—Permanent capital stock: Total amount authorized, \$1,000,000; total amount subscribed, \$798,400.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares	Par value of shares.	—		
1. Fully called	\$ 3,288	\$ 100	\$ 328,800	\$ c. 328,800 00	\$ c. 326,300 25
2. Partly called	4,696	100	469,600	143,299 75	
Totals	7,984		798,400	472,099 75	326,300 25

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent capital stock or shares.

1. (a) Ordinary joint stock capital, fully called; total called,	
; total paid thereon	\$328,800 00
2. (b) Ordinary joint stock capital, per cent. called; total called,	
; paid thereon	121,971 81
(cc) Joint stock capital paid in advance of calls	21,327 94
4. (d) Dividends declared in respect of (1), (2) and (3), but not yet paid	10,885 93
6. (f) Reserve fund in respect of (1), (2) and (3)	42,362 60
7. (g) Contingent fund in respect of (1), (2) and (3)	5,848 40

Liabilities to the Public.

27. Deposits payable on notice, \$72,906.91	\$72,906 98
29. Debentures issued in Canada	198,121 01
30. Interest due and accrued on (29)	3,486 15
40. Other liabilities to the public:	
41. (a) Sundry accounts payable	3,910 81
	<hr/>
	278,424 95

Total liabilities

\$809,621 63

Gr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by mortgages of land.

9. (a) Debts (other than item 10) secured by mortgages of land .. \$769,736 03

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	17,434 07	17,434 07
--	-----------	-----------

D.—Unsecured Debts.

27. (a) Due from agents and others 680 76

E.—Cash.

31. (a) Cash on hand	1,835 50	
32. (b) Cash in bank	18,180 99	20,016 49

F.—Assets not hereinbefore mentioned.

37. (a) Office furniture	1,754 28
---------------------------------------	-----------------

Total assets

8809.621 63

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(b) Cash (not already shown under (1)):		(Col. 1.)	(Col. 3.)	(Total Col. 4.)
2.	(i) On hand .....	.....	8464 37	
3.	(ii) In bank .....	.....	2,765 04	

**B.—Sums received wholly or partly on capital
Stock.**

4. (a) Calls on joint stock capital		183,444 13
5. (b) Premiums on (4). Capital Stock	5,848 40	.....

C.—Receipts on account of Investments, Loans
or Debts

(a) On mortgages of realty:—

10.	(i) Principal	84,004 62
11.	(ii) Interest	21,269 50

(b) On other securities:

13.	(ii) Interest or dividends	1,976 29
-----	----------------------------------	----------	-------

D.—Receipts from real estate owned beneficially by Corporation.

16. (a) Sales		334,287 80
17. (b) Rents	30,816 47	
(c) Rents, 1903, collected		1,997 37

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	58,896 04
27. (c) Borrowed on debentures	25,104 49

G.—Receipts from other sources, viz.:

30. (a) Accounts payable	2,061	30
31. (b) Dividends unpaid	3,608	65
(c) Due from agents	1,298	00

\$59,910 66	\$697,921 81	\$757,833 47
-------------	--------------	--------------

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums loaned or invested on Capital Account.

	(Col. 1.)	(Col. 3.)	(Total. Col. 4.)
1. (a) Loaned on mortgages of realty		\$531,579 50	
(b) Loaned and invested in other securities		702 51	
7. (d) Incumbrances on realty paid off and interest	10,023 76	153,154 49	

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	14,405 82		
--	-----------	--	--

C.—Borrowed Money other than foregoing or interest paid thereon, viz.:

19. (b) Deposits: interest	468 70		
20. (c) Debentures: interest	8,619 55		

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	11,562 82		
26. (b) Commission or brokerage	1,140 27		
28. (d) Stationery, postage, printing and advertising ..	1,886 98		
29. (e) Law costs	34 12		
30. (f) Fuel, rent, taxes (other than 7 and 32), and rates.	762 52		
31. (g) Travelling expenses	967 68		
22. (h) Registration fees	383 75		

E.—Other expenditures, viz.:

33. (a) Office furniture		274 10	
34. (b) Sundry expenses	1,849 41		

F.—Balance.

27. (a) Cash on hand and in banks		20,016 49	
Totals	\$52,105 38	\$705,727 09	\$757,832 47

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada, which will mature in 1905, \$28,525.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$30,643.61.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 4 per cent., on debentures, 4 and 5 per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 9 per cent.; on other securities, 7 per cent.
7. Of the mortgages held by the Corporation, \$570,570.65 is realty in Ontario, and \$199,165 31 on realty situated elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of the mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to Corporation, \$1,469,522.75.
11. How often are the securities held by the Corporation valued? Once a year.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$2,500; Accountant, \$1,000; Cashier, \$1,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? January, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: A. C. Neff, F.C.A., and C. R. W. Postlethwait, C.A., Toronto. For 1905: A. C. Neff, F.C.A., and C. R. W. Postlethwait, C.A., Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 1st January and 1st July, at the rate of 5 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 22nd February, 1905.
17. Date of last Annual Meeting? 18th February, 1904.

THE SIMCOE LOAN AND SAVINGS COMPANY.

Head Office, Barrie, Ontario.

The declaration of incorporation was filed with the Clerk of the Peace for the County of Simcoe on the 18th April, 1896. The incorporation was effected under the Building Societies Act, R. S. O., 1887, c. 169, s. 2, as amended by 56 V. c. 31, s. 1, which added to the said section 2, subsection 3, as follows:—

"(3) No society constituted or incorporated under this section after the first day of June, 1893, shall have power to loan money or to transact a loaning business or carry on its operations outside the limits of the County in which the society is constituted or incorporated."

By virtue of the above provision, which was continued by the Loan Corporations Act R. S. O., 1897, c. 205; s. 8 (3, 4) the Company was until 31st May, 1899, a Local Loan Corporation, limited in its operations to the County of Simcoe. The company having fulfilled the requirements of the said section, was, by Letters Patent of Ontario, bearing date 31st May, 1899, relieved from the above restriction of its operations.

The lending and the borrowing powers are governed by the Loan Corporations Act.

ANNUAL STATEMENT

Of the conditions and affairs of the Simcoe Loan and Savings Company of Barrie, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 95 Dunlop Street, in the Town of Barrie, in the Province of Ontario.

The Board is constituted of five directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December 1904, were as follows, together with their respective terms of office:—

J. H. Plummer, President, Sydney, C. B.,	30th Jany. 1904,	30th Jany. 1905.
C. H. Ross, Vice-President, Barrie, Ont.	"	"
Hon. Charles Drury, Director, Barrie, Ont.	"	"
Geo. Ball, Director, Barrie Ont.	"	"
O. H. Lyon, Managing Director, Secy., Barrie, Ont.		

A. Permanent capital stock; total amount authorized, \$250,000; total amount subscribed, \$110,050, as more particularly set out in Schedule A hereto

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation
	No. of shares.	Par value.	—		
1. Fully called.....	2,201	\$ 50	\$ 110,050	\$ 105,050	\$ 5,000

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.
(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$110,050; total paid thereon	\$105,050 00	
6. (f) Reserve Fund in respect of (1)	4,434 13	\$109,484 13

Liabilities to the Public.

27. Deposits payable on notice	76,438 64	
29. Debentures issued in Canada	75,000 00	
30. Interest due and accrued on (29)	1,446 58	152,885 22

Total liabilities		\$262,369 35
-------------------	--	--------------

Cr. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (b) Debts (other than item 10) secured by mortgages of land		\$119,898 75
--	--	--------------

C.—Debts not above enumerated for which the Corporation holds security as follows:

22. (j) Debts secured by railway bonds	32,745 21	
24. (l) Life insurance policies	39,861 15	
25. (m) Debts secured by light and power bonds	10,051 62	82,657 98

E.—Cash.

31. (a) On hand	860 46	
32. (b) In bank	13,055 30	13,915 76

F.—Assets not hereinbefore mentioned.

37. (a) Insurance Company Stock	7,399 11	
38. (b) Electric Tramway bonds	10,041 09	
39. (c) Light and Power Co. bonds	11,512 23	
40. (d) Railway bonds	16,539 72	
41. (e) Trust Co. stock	404 71	45,896 86

Total assets		\$262,369 35
--------------	--	--------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

	(Col. 1.)	(Col. 4.)
(b) Cash (not already shown under (1)):		
(i) On hand	\$668 36	
3. (ii) In bank	4,399 86	\$5,068 22

C—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:		
10. (i) Principal	13,248 54	
11. (ii) Interest	6,686 82	
(b) On other securities:		
12. (i) Principal	61,013 15	
13. (ii) Interest or dividends	7,922 51	
(c) Unsecured debts:		
14. (i) Principal	700 75	89,571 77

E.—Miscellaneous.

18 (a) Commission, brokerage (or remuneration as corporate agent, trustee, etc.)	67 45	67 45
--	-------	-------

F.—Borrowed Money.

25. (a) Bank or other advances, discounts or overdrafts (maximum overdraft)	4,157 88	
26. (b) Borrowed by taking deposits	61,372 04	65,529 92

Total		\$160,237 36
-------	--	--------------

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty	\$11,310 90	
(b) Loaned or invested in other securities	69,146 03	
7. (d) Loan written off	428 01	
		\$80,884 94

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	5,252 50	5,252 50
--	----------	----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

18. (a) Bank account (principal and interest)	4,161 50	
19. (b) Deposits: Principal, \$48,161.35; interest, \$2,773.50	50,934 85	
20. (c) Debentures issued in Canada, interest	3,000 00	
		58,096 35

D.—Management Expenses (other than foregoing).

25. (a) Salaries and fees	\$1,619 96	
26. (c) Commission or brokerage	54 90	
28. (d) Stationery, postage, printing and advertising	71 42	
30. (f) Fuel, rent, taxes (other than 7 or 32) and rates	228 63	
31. (g) Travelling expenses	14 00	
32. (h) Registration fee	98 90	
		2,087 81

F.—Balance.

(c) Cash on hand and in bank	13,915 76
Totals	\$160,237 36

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$75,000.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$16,031.78.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposit, $3\frac{1}{2}$ per cent.; on debentures, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, $5\frac{1}{2}$ per cent., on other securities, 5 per cent.
7. Of the mortgages held by the Corporation, all are on realty situate in Ontario.
8. Loans written off or transferred to real estate account. \$428.01.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, \$220,000.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? January, 1905.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904, C. F. A. Gregory and Frank Plummer. For 1905; not yet appointed.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 30th June and 31st December, $2\frac{1}{2}$ per cent. respectively.
16. What is the date appointed for the Annual Meeting? 30th January, 1905.
17. Date of last Annual Meeting? 30th January, 1904.

THE TORONTO MORTGAGE COMPANY.

Head Office, Toronto Street, Toronto.

This Company was under the provisions of the Loan Corporations Act, formed by the amalgamation of the Building and Loan Association with the Union Loan and Savings Company.

The agreement for the amalgamation of these Companies under the new corporate name of The Toronto Mortgage Company was executed by both Companies on the 27th September, 1899; was ratified by the shareholders of the respective Companies on the 15th November, 1899, and was assented to by the Lieutenant-Governor of the Province of Ontario by Order-in-Council dated 15th December, 1899.

ANNUAL STATEMENT

Of the condition and affairs of The Toronto Mortgage Company, of Toronto, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 13 Toronto Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of nine directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Hon. Wm. Mortimer Clark, LL.D., W.S., K.C.,		
President, Toronto, 10th February, 1904,	8th February, 1905.	
Thomas R. Wood, Vice-President,	"	"
Larratt W. Smith, K.C., D.C.L., Director	"	"
Wellington Francis, Director,	"	"
Casimer S. Gzowski, Director,	"	"
Andrew J. Somerville, Director,	"	"
Thomas Gilmour, Director	"	"
Geo. Martin Rae, Director,	"	"
Henry B. Yates, M. D., Director, Montreal,	"	"
Walter Gillespie, Managing-Secretary, Toronto.		

A. Permanent capital stock: Total amount authorized, \$1,445,860; total amount subscribed, \$724,550, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Societies Act.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.	—		
1. Fully called	14,491	\$ 50	\$ 724,550	\$ 724,550	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$724,556; total paid thereon	\$724,550 00	
4. (d) Dividends declared in respect of (1), but not yet paid	18,113 75	
Special bonus of 1 per cent.	7,245 50	
5. (e) Unappropriated profits in respect of (1)	214 00	
6. (f) Reserve fund in respect of (1)	275,000 00	
7. (g) Contingent fund in respect of (1)	19,488 33	
		\$1,044,611 59

Liabilities to the Public.

27. Deposits (including unclaimed deposits) including interest	\$147,314 43	
29. Debentures issued in Canada	294,850 00	
30. Interest due and accrued on (29)	4,766 58	
31. Debentures issued elsewhere than in Canada	820,670 23	
32. Interest due and accrued on (31)	5,285 18	
40. Other liabilities to the public, viz.:		
41. (a) Sundry unpaid accounts	514 84	
		1,273,401 26
Total liabilities		\$2,318,012 84

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property owned Beneficially by Corporation.

1. (a) Office premises situate as follows:—		
2. (i) At 13 and 15 Toronto Street, Toronto, held in "freehold"	\$100,000 00	
3. (ii) At 28 and 30	7,200 00	
5. (b) Freehold land (including buildings) other than foregoing		\$107,200 00

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$1,805,159 54	
10. (b) Debts secured by mortgaged land held for sale	30,375 00	
10. (bb) Debts secured by land held by the Company as mortgagee in possession, or secured by land for the rents and profits of which the Company is accountable	43,200 00	
		1,878,734 54

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	\$2,079 45	
22. (j) Call loans on bank stocks	138,358 72	
23. (k) Call loans on debentures	20,150 00	
		160,588 17

E.—Cash.

31. (a) On hand	\$2,959 01	
32. (b) In banks	39,065 00	
		42,024 01

F.—Assets not hereinbefore Mentioned.

37. (a) Bonds and stocks owned by Company		129,466 12
Total assets		\$2,318,012 84

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(a) Cash (not already shown under (1)) :—	
2. (i) On hand	\$729 83
3. (ii) In banks	16,677 12
4. (a) Paid on joint stock permanent capital	10 00

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—	
10. (i) Principal	416,515 71
11. (ii) Interest	111,615 89
(b) On other securities :—	
12. (i) Principal	60,303 40
13. (ii) Interest or dividends	9,291 01

D.—Receipts from Real Estate owned Beneficially by Corporation.

17. (b) Rent from Company's office building	1,744 7½
---	----------

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	244,002 93
27. (c) Borrowed on debentures	203,947 28

G.—Receipts from other sources.

30. (a) Sundry interest	4,974 99
Totals	\$1,069,812 92

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	(Col. 4.)
(b) Loaned on other securities :—	\$430,804 23
2. (i) Call loans on bank stocks and on debentures	39,381 67

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	36,227 00
Unclaimed dividends paid	9 00

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits, including interest	239,731 11
20. (c) Debentures issued in Canada: Principal, \$30,950; interest, \$11,769.48	42,719 48
21. (d) Debentures issued elsewhere: Principal, \$183,590.09; interest, \$31,389.69	214,979 78

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	9,466 40
26. (b) Commission or brokerage and inspection fees	4,810 59
28. (d) Stationery, postage, printing and advertising	960 40
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	2,204 25
32. (h) Registration fees	150 00

E.—Other Expenditures, viz.:

33. (a) Montreal Telegraph Co. stock purchased	6,345 00
--	----------

F.—Balance.

37. (a) Cash on hand and in various banks	42,024 01
Totals	\$1,069,812 92

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$22,100.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, \$156,175.61.
3. Amount of other existing obligations of the Corporation which will mature in 1905 (exclusive of deposits). None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$319,088.17.
5. Average rate of interest per annum paid by the Corporation during 1904 on deposits, 3.586 per cent.; on debentures, 3.912, per cent.
6. Average rate of interest per annum received by the Corporation during 1904 on mortgages of realty, 5 per cent.; on other securities, 5½ per cent.
7. Of the mortgages held by the Corporation, \$1,849,632.14, is on realty situate in Ontario, and \$36,302.40 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$70,797.95.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. Number 2; amount \$10,150.00.
10. Aggregate market value of the land mortgaged to the Corporation, estimated \$3,900,000.
11. How often are the securities held by the Corporation valued? Mortgages yearly, properties as occasion requires.
12. (a) What officers of the Corporation are under bond and for what sums respectively? All except one in sums from \$1,000 to \$5,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? 31st December, 1904.
14. Name and addresses of the auditors respectively for 1904 and 1905 (if appointed).
For 1904, E. R. C. Clarkson, F.C.A., and Henry W. Eddis, F. C. A., of Toronto.
For 1905, E. R. C. Clarkson, F. C. A., and Henry W. Eddis, F. C. A., of Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 2nd July, 1904, 2½ per cent.; and 3rd January, 1905, 2½ per cent. and special bonus of 1 per cent.
16. What is the date appointed for the Annual Meeting? 8th February, 1905.
17. Date of last Annual Meeting? 10th February, 1904.

*THE TRUST AND LOAN COMPANY OF CANADA.

Head Office, London, England.

Chief Agency for Ontario, 25 Toronto Street, Toronto.

Commissioners and Commissioner for conducting the affairs of the Company in Canada, and more particularly for the purposes set out in the Power of Attorney, dated 15th December, 1898, James O'Neil Ireland, Toronto; Richard Doyme MacDonnell, Winnipeg, and Laurence Edye, Colonel, Montreal, jointly, and each of them separately, and the survivors and survivor of them.

CONSTATING INSTRUMENTS.

1843. 7 Vic. c. 63 of the Province of Canada: An Act for Incorporating and Granting Certain Powers to the Upper Canada Trust and Loan Company. (9th December, 1843).

1844. Deed of Settlement. (1st June, 1844).

1845. 9 Vic. chap. 96 (Province of Canada); An Act to amend and Extend Certain Provisions of 7 Vic. c. 63. (13th March, 1845).

1845. 13th November. Royal Charter (England).

1856. 14 Vic. c. 138 (Province of Canada); An Act to alter and amend 7 Vic. c. 63 and 9 Vic. c. 96. (10th August, 1850).

1858. 22 Vic. c. 132 (Province of Canada): An Act to amend and Extend 7 V. c. 63, 9, V. c. 96 and 14 V. c. 138. (16th August, 1858).

1862. 25 V. c. 72 (Province of Canada): An Act for facilitating the conveyance by the Trust and Loan Company of Upper Canada of lands in the Province of Canada, by and through their Commissioners or Attorneys. (9th June, 1862).

1868-9. 32 Vic. c. 65 (Province of Ontario): An Act to amend 25 V. c. 72 (Province of Canada) by declaring the intention of the same, and Confirming Conveyances made by the Trust and Loan Company thereunder. (23rd January, 1869).

1872. 20th February. Supplementary Royal Charter (England): Changing the corporate name until 25th March, 1872, to "The Trust and Loan Company of Upper Canada," and from and after the 25th March, 1872, to "The Trust and Loan Company of Canada," also changing the principal place of business in Canada from Kingston to Toronto, etc.

1882. Chap. 111 (Dominion of Canada); An Act for amending the Acts relating to the Company and for enlarging its powers. (17th May, 1882). This Act extends the powers of the Company to the whole Dominion, and empowers it to issue debenture stock.

1882. 45 V. c. 51 (Province of Manitoba).

As to borrowing powers see above instruments, and particularly Articles 68 and 82 of Royal Charter (13th November, 1845).

ANNUAL STATEMENT

Of the condition and affairs of the Trust and Loan Company of Canada at the 30th September, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 7 Great Winchester street, in the City of London, England.

The chief agency for Ontario is situate at No. 25 Toronto street, in the City of Toronto, in the Province of Ontario.

The Chief agent and attorney for Ontario is James O'Neil Ireland, and his address is 25 Toronto street, Toronto, in the Province of Ontario.

The Board is constituted of 6 or more directors, holding office for three years.

The directors and chief executive officers of the Corporation at the 30th September, 1904, were as follows, together with their respective terms of office:

† Charles Morrison, President, London, Eng.;	May, 1903; May, retired.
‡ Sir V. Caillard, Deputy Chairman, London, Eng.;	May, 1902; May, 1905
Lord Stratheden and Campbell, Director, London, Eng.;	" 1904; " 1907
Admiral Field, C.B., Director, Alverstoke, Eng.;	" 1902; " 1905
Frederick Henry Scott, Director, Brightling Park, Eng.;	" 1904; " 1907
Russell Stephenson, Director, London, Eng.;	" 1903; " 1906
Hon. S. Pell, London, Eng.;	Nov., 1904; " 1906
Francis Dixon Brown, Secretary, Great Winchester Street, London.	

† Since retired. ‡ Since elected President.

* Notice that this Company was discontinuing business in Ontario, was given 1st day of March, A.D. 1905.

A.—Permanent capital stock; Total amount authorized, \$14,600,000; total amount subscribed, \$7,300,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies Act or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining uncalled.
		£	\$ c.	\$ c.	\$ c.
2. 25 per cent. called per share of £20.....	50,000	20	4,866,666 67	1,216,666 67	3,650,000 00
3. 15 per cent. called per share of £20.....	25,000	20	2,433,333 33	365,000 00	2,068,333 33
Totals	75,000		7,300,000 00	1,581,666 67	5,718,333 33

LIST OF SHAREHOLDERS AS AT 30TH SEPTEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 30TH SEPTEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital, 25 per cent. called; total held, \$4,866,666.67; total paid thereon	\$1,216,666 67
3. (c) Ordinary joint stock capital, 15 per cent. called; total held, \$2,433,333.33; total paid thereon	365,000 00
5. (e) Unappropriated profits in respect of (2) and (3)	150,800 07
6. (f) Reserve fund in respect of (2) and (3)	858,395 10
This Company issues no stock other than as above.	

C.—Liabilities to Shareholders other than as already shown under A. or B., viz.:

26. (a) Suspense account, London	4,866 67
(b) Exchange account	3,204 48
(c) Income tax	15,600 81
Total to shareholders	\$2,614,534 20

Liabilities to the Public.

31. Debentures issued elsewhere than in Canada	\$4,576,985 77
39. Due on loans in process of completion or to pay any assumed mortgages	19,730 79
40. Other liabilities to the public, viz.: Being sundry creditors in Canada other than No. 39, and consisting of balance due to them, \$49,828.56, less No. 39	30,097 77
Sundry creditors in London, Eng.	527 22
Total liabilities	\$7,241,875 75

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the Corporation.

1. (a) Office premises situate as follows:—	\$40,442 00
(i) At Toronto, Ontario, held in freehold	23,650 00
3. (ii) At Montreal, Quebec, held in freehold	49,985 54
4. (iii) At Winnipeg, Manitoba, held in freehold	60,905 54
5. (b) Freehold land (including buildings) other than foregoing	

Forward

\$174,983 08

BALANCE SHEET.

Dr.

Assets.—Continued.

Brought forward		\$174,983 08
B.—Debts secured by Mortgages of Land.		
9. (a) Debts (other than item 10) secured by mortgages of land	\$5,978,918 55	
10. (b) Debts secured by mortgaged land held for sale	8,060 00	
		5,986,918 55
11. (c) Interest, etc., due or accrued on item (9) and (10) and not included therein		183,658 93
(e) Debts (other than item 10) secured by assignment of Life Policies		800 00
E.—Cash.		
31. (a) On hand	\$ 58 27	
32. (b) In banks, London, England	62,035 45	
In banks in Canada	64,974 74	
		127,068 46
F.—Assets not hereinbefore Mentioned.		
37. (a) National war loan	\$361,922 72	
38. (b) Dominion Government Bonds	206,346 66	
39. (c) Canada Government, Inscribed stock	143,810 00	
40. (d) Metropolitan Board of Works bonds, London	32,065 11	
41. (e) Transvaal Government stock	24,302 24	
		768,446 73
Total assets		\$7,241,875 75

CASH ACCOUNT.

Receipts for the year ending 30th Sept., 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 30th September, 1903.

	(Col. 1.)	(Col. 3.)	(Total Col. 4.)
1. (a) Capital account		\$2,440,059 07	
(b) Cash (not already shown under (1)) :—			\$269,043 79
2. (ii) In bank			

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—			871,396 05
10. (i) Principal			335,558 16
11. (ii) Interest received during the year			
Interest paid and accrued during the year ..	\$381,599 64		
(b) On other securities :—			125,700 00
12. (i) Principal			2,508 88
13. (ii) Interest			
(c) Unsecured debts :—			
15. (ii) Interest on current accounts at banks	3,934 74		
(iii) Interest on deposit receipts	2,004 77		

D.—Receipts from Real Estate Owned Beneficially by the Corporation.

16. (a) Sales (not included in any of foregoing items)			9,579 98
17. Rents			9,760 86

F.—Borrowed Money.

27. (c) Borrowed on debentures			415,418 67
--------------------------------------	--	--	------------

G.—Receipts from other sources, viz.:

30. (a) Sundry receipts, including losses by fire paid by insurance companies and deposits by applicants for loans			61,361 49
(c) Registration fees in London	65 33		
Totals	\$387,664 48		

CASH ACCOUNT.—Continued.

Expenditure for the year ending 30th September, 1904.

I.—Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		
	(Col. 1.)	(Col. 4.)
1. (a) Loaned on mortgages of realty		\$1,195,625 99
(c) Insurance, taxes, etc., advanced on property mortgaged to the Corporation		33,731 64
B.—Expended on Stock Account.		
8. Dividends paid on permanent stock	\$110,716 67	
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:		
18. (a) Refunds, including payments to borrowers of amounts received from insurance companies		6,928 07
21. (d) Debentures issued elsewhere: interest, \$.....	169,898 68	
D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	41,899 43	
26. (b) Commission or brokerage	11,772 30	
28. (d) Stationery, postage, printing and advertising, and petty charges	8,737 99	
29. (e) Law costs	1,049 24	
30. (f) Fuel, rent, taxes (other than 7 and 32) and office furniture....	6,968 60	
31. (g) Travelling expenses and inspections	2,464 64	
32. (h) Provincial, municipal and business taxes	2,044 44	
Interest on amount of reserve fund uninvested	1,671 68	
E.—Other Expenditure.		
34. (a) Permanent improvements, insurance and taxes on property owned by Company		11,709 16
35. (b) Bond stamps, \$579.21; pensions, \$4,054.99	4,634 20	
36. (c) Carried to reserve and contingent accounts	25,746 81	
F.—Balance.		
37. (a) Cash on hand and in banks		127,068 46
Totals	\$387,604 48	

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 30TH SEPTEMBER, 1904.

- Amount of debentures issued by the Corporation elsewhere which will mature in 1905, \$1,079,691.29.
- Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$934,209.00.
- Average rate of interest per annum paid by the Corporation during 1904, on debentures, 3.77 per cent.
- Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 6.54 per cent.
- Of the mortgages held by the Corporation \$474,472.49 is on realty situate in Ontario, and \$5,512,446.06 is on realty situate elsewhere.
- Loans transferred to real estate account during 1904, \$37,650.
- Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation during 1904. No., 13; amount, \$22,255.
- Aggregate market value of the land mortgaged to the Corporation. Estimated at \$15,560,376.00.
- How often are the securities held by the Corporation valued? Company's officials make frequent inspections.
- (a) What officers of the Corporation are under bond and for what sum respectively? Toronto: Registrar, \$4,000; Accountant, \$2,000; Clerk, \$1,000; Montreal: Accountant, \$4,000; Registrar, \$2,000; Inspector, \$4,000; Assistant Accountant, \$1,000; Winnipeg: Assistant Managers, \$4,000 and \$2,000; Accountant, \$4,000; Assistant Accountant, \$2,000. By Guarantee Company.
- When were the accounts of the Corporation last audited? 8th November, 1904.
- Names and addresses of the auditors for 1904 and 1905: Augustus Hendricks, 6 Observatory Gardens, Kensington, London, Eng.; A. Grant Meek, Hillworth House, Devizes, England.
- What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 1st June, 1904; dividend at rate of 6 per cent. per annum and $\frac{1}{4}$ per cent. bonus. 3rd December, 1904; dividend at rate of 6 per cent. per annum and $\frac{1}{4}$ per cent. bonus.
- What is the date appointed for the Annual Meeting? May, 1905.
- Date of the last Annual Meeting? 26th May, 1904.

THE VICTORIA LOAN AND SAVINGS COMPANY.

Head Office, Lindsay, Ontario.

Incorporated under the Building Societies Act, 1887, c. 169, as amended by 56 V., c. 31 (O) by declaration filed with the Clerk of the Peace for the County of Victoria, on the 4th September, 1897.

The operations of the Company were for a time by law restricted to the County of Victoria (56 V. c. 31), continued by R.S.O. 1897, c. 205, s. 8 (4); but the Company having fulfilled the statutory requirements, was by Letters Patent of Ontario, bearing date 11th November, 1898, relieved from the above restriction of its operations.

The lending and borrowing powers are governed by the Loan Corporations Act, R. S.O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Victoria Loan and Savings Company, of Lindsay, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is on Kent street, in the Town of Lindsay, in the Province of Ontario.

The Board is constituted of ten directors holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

W. Flavelle, President, Lindsay, Ont.;	February, 1904; February, 1906
W. H. Clark, M.D., Vice-President, Lindsay, Ont.;	" "
R. J. McLaughlin, K.C., Lindsay, Ont.;	" "
W. H. Stevens, B.A., Director, Lindsay, Ont.;	" "
F. C. Taylor, Director, Lindsay, Ont.;	" "
C. Chittick, Director, Lindsay, Ont.;	February, 1903; February, 1905
S. Armour, Director, Lindsay, Ont.;	" "
Rev. N. Hill, Director, King;	" "
H. J. Lytle, Director, Lindsay, Ont.	" "
J. W. Ray, M.D., Cambray, Ont.;	" "
James Low, Manager, Lindsay, Ont.;	" "

A.—Permanent capital stock: Total amount authorized, \$300,000; total amount subscribed, \$150,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting 31st December, 1904.			Total amount of actual payment- thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value.			
1. Fully called.....	1,500	\$ 100	\$ 150,000	\$ 134,485 66	\$ 15,514 34

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

*Payments are made as requested by directors.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

1. (a) Ordinary joint stock capital fully called, \$		
\$	; total paid thereon	\$134,485 66
4. (d) Dividends declared in respect of (1), but not yet paid		3,358 10
5. (e) Unappropriated profits in respect of (1)		1,466 35
6. (f) Reserve fund in respect of (1)		16,000 00
		\$155,310 11
Liabilities to the Public.		
27. Deposits payable on demand, \$73,499.75; on notice, \$65,000	\$138,499 75	
28. Interest on deposits, due, or accrued, or capitalized	4,297 08	
29. Debentures issued in Canada	91,652 56	
30. Interest due and accrued on (29)	1,749 18	
37. Owing to banks (including interest due or accrued)	2,361 38	
		238,559 95
Total liabilities		\$393,870 06

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.		
B.—Debts secured by Mortgages of Land.		
9. (a) Debts (other than item 10) secured by mortgages of land	\$301,111 28	
11. (c) Interest due or accrued on item (9) and not included therein	10,499 56	
		\$311,610 84
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
14. (b) Debts secured by municipal bonds or debentures	\$4,215 00	
15. (c) Debts secured by public school debentures	10,441 81	
20. (h) Debts secured only by permanent stock or shares of the Corporation	9,972 11	
22. (j) Debts secured by bonds	20,381 16	
24. (l) Debts secured by bank and loan companies' stocks	33,789 88	
26. (n) Interest due and accrued on items 14, 15, 20, 22 and 24, and not included therein	1,092 88	
		79,892 84
E.—Cash.		
31. (a) On hand	\$1,855 06	
32. (b) In bank	11 32	
		\$1,866 38
F.—Assets not hereinbefore Mentioned.		
37. (a) Office furniture		500 00
Total assets owned beneficially by the Corporation		\$393,870 06

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.			
A.—Balance from 31st December, 1903.			
	(Col. 1.)	(Col. 3.)	(Total Col. 4.)
(a) Cash (not already shown under (1)):			
2. (i) On hand	\$1,467 02		
3. (ii) In bank	5,314 50		\$6,781 52
B.—Sums received wholly or partly on Capital Stock.			
4. (a) Calls on joint stock permanent capital	\$17 00	\$2,985 61	
5. (b) Premiums on (4)			3,002 61
C.—Receipts on account of Investments, Loans or Debts.			
(a) On mortgages of realty:—			
10. (i) Principal	\$56,797 11		
11. (ii) Interest	20,169 46		
(b) On other securities:—			
12. (i) Principal	2,644 14		79,550 71
E.—Miscellaneous.			
18. Commission, brokerage (or remuneration as Corporate agent, trustee, etc.)	\$229 10		
19. Premiums or bonuses on loans	76 10		305 20
F.—Borrowed Money.			
25. (a) Bank or other advances, discounts or overdrafts	\$2,361 38		
26. (b) Borrowed by taking deposits	176,177 62		
27. (c) Borrowed on debentures	68,423 95		246,962 95
G.—Receipts from other sources.			
30. (a) Contra account, etc.	\$30,347 21		30,347 21
Total			\$366,950 20

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty	\$69,623 55	
(b) Loaned or invested in other securities:—		
2. (i) Municipal or school bonds	9,243 06	
		\$79,066 61

B.—Expended on Stock Account.

3. Dividends paid on permanent stock	\$6,571 80	6,571 80
--	------------	----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

18. (a) Bank account (principal and interest)	33 00	
19. (b) Deposits: Principal, \$169,804.26; interest, \$4,297.08	174,101 34	
20. (c) Debentures issued in Canada: Principal, \$68,800.08; interest, \$3,926.19	72,726 27	
24. (g) Guarantee paid, interest	18 20	
		246,878 81

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$2,215 70	
26. (b) Commission or brokerage	75 15	
28. (d) Stationery, postage, printing and advertising	252 27	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	498 07	
31. (g) Travelling expenses	5 05	
33. (i) Other management expenditure	51 03	
		3,097 27

E.—Other Expenditure.

35. (e) Contra accounts, etc.	\$29,469 33	29,469 33
------------------------------------	-------------	-----------

F.—Balance.

37. (b) Cash on hand and in bank		1,866 38
Totals		\$366,950 20

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. \$65,760.64.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$2,465.00.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3.5 per cent.; on debentures, 4.05 per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 5.69 per cent.; on other securities, 4.86 per cent.
7. Of the mortgages held by the Corporation \$298,111.28 is on realty situate in Ontario, and \$3,000.00 is on realty situate elsewhere.
8. Loans written off or transferred to real estate during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$540,000.
11. How often are the securities held by the Corporation valued? When renewed or if interest gets in arrears.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$5,000; general agent, \$2,000; by Guarantee Company.
13. When were the accounts of the Corporation last audited? January, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905. For 1904: D. Eagleson, C.A., Lindsay; John Kennedy, Lindsay. For 1905: D. Eagleson, C.A., and John Kennedy, Lindsay.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 1st January, and 1st July at rate of 5 per cent per annum.
16. What is the date appointed for the Annual Meeting? 1st Monday in February.
17. Date of last Annual Meeting? 6th February, 1905.

THE NORTH BRITISH CANADIAN INVESTMENT COMPANY (LIMITED).

Head Office, Glasgow, Scotland.

Attorney for Ontario to receive service or notice under the Loan Corporations Act, (Power of Attorney dated 10th May, 1904); William Barclay McMurrich, K.C., Frank Egerton Hodgins, K.C., and John Dewar McMurrich, all of Toronto.

Attorneys for Canada to affix corporate seal used in Canada under The (Imp.) Companies Seals Act, 1864, and to execute bills, notes, cheques, drafts and other negotiable instruments (Power of Attorney dated 10th May, 1904). Alexander Bain, Winnipeg; William Barclay McMurrich, K.C., Toronto; Frank Egerton Hodgins, K.C., Toronto; Wm. Bain, Winnipeg, and John Dewar McMurrich, Toronto, or any two of them.

CONSTATING INSTRUMENTS.

The Company was incorporated under the (Imperial) Companies' Act, 1862, 1867, by certificate of incorporation, dated 14th October, 1876, and issued by the Registrar of Joint Stock Companies for Scotland.

The Memorandum of Association, and the articles of Association (both instruments bearing date 13th October, 1876), were filed in the Joint Stock Companies' Registry Office, Edinburgh, Scotland.

The Company, under the former law, received authority to do business in Ontario by license, bearing date 30th December, 1876, issued under 39 V., c. 27, Ontario.

For the lending powers, see Memorandum of Association, section 3 (3).

For the borrowing powers, see Memorandum of Association, section 3 (3); also Articles of Association, Arts. 104, 107-111. As to debenture stock, see Art. 113.

As to the lending and the borrowing powers in Ontario, see Loan Corporations Act, A.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The North British Canadian Investment Company (Limited), Glasgow, Scotland, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at 205 St. Vincent street, in the City of Glasgow, in Scotland.

The chief agency of Ontario is situate at No. 103 Bay street, in the City of Toronto, in the Province of Ontario.

The attorneys for Ontario are McMurrich, Hodgins and McMurrich, and their address is No. 103 Bay street, Toronto, in the Province of Ontario.

The Board is constituted of five directors holding office for three years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Hugh Wright, President, of Altiery, Port William, Scotland, Apl., 1904; Apl., 1907	
Robert Anderson, Director, Glasgow, Scotland;	" "
Geo. D. Sterling, C.A., Director, Glasgow, Scotland;	" "
David Sturrock, Director, Glasgow, Scotland;	Apl., 1905; Apl., 1908
Robert W. Henry, Director, Glasgow, Scotland;	" "
A. Bain, General Manager in Canada, Winnipeg, Man.	
James Muirhead, Secretary, Glasgow, Scotland.	

A.—Permanent capital stock: Total amount authorized, \$2,433,333.33; total amount subscribed, \$2,433,333.33, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and Permanent capital stock created by virtue of Joint Stock Companies Acts or Private Acts.

Description.	No. of Shares.	Par value.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
1. 20 per cent. called.....	50,000	£ 10	\$ 2,433,333 33	\$ 486,666 66	\$ None.
4. Paid in anticipation of calls.....				3,893 33	
Totals	50,000		2,433,333 33	490,559 99	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital, 20 per cent. called; total called, \$486,666.67; total paid thereon	\$486,666 67	
(cc) Paid in advance of calls	3,893 33	
4. (d) Dividends declared in respect of (2), but not yet paid \$135 17	7,455 17	
reserved for dividend to be declared	7,300 00	
6. (f) Reserve fund in respect of (2)	131,400 00	
7. (g) Contingent fund in respect of property held for sale \$10,625 30	28,429 28	
Unappropriated profits	17,803 98	
		\$457,844 45
Liabilities to the Public.		
35. Debenture stock issued elsewhere than in Canada	\$638,419 07	
36. Interest due or accrued on (35)	3,744 27	
40. Other liabilities to the public, viz.:—		
41. (a) Sundries	11,823 24	
		653,986 58

Total liabilities \$1,311,831 03

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the Corporation.

5. (b) Freehold land (including buildings) other than foregoing	\$115,358 69	
6. (c) Leasehold land (including buildings) other than foregoing	9,474 78	
		\$124,833 47

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land ..	\$784,033 81	
10. (b) Debts secured by mortgaged land held for sale	151,845 83	
11. (c) Interest due or accrued on items 9 and 10 and not included therein	25,391 05	
		961,270 69

C.—Debts not above enumerated for which the Corporation holds securities as follows:

15. (c) Debts secured by public school debentures	\$ 800 00	
16. (d) Debts secured by Loan Company's stock	2,811 00	
22. (j) Debts secured by heritable property in Glasgow, Scotland	26,766 66	
23. (k) Debts secured by Feu Duties	10,950 00	
24. (l) Deposits with Colonial Banks (less written off for possible loss)	17,618 10	
		58,945 76

E.—Cash.

31. (a) On hand	\$ 180 40	
32. (b) In banks	164,110 15	
		164,290 55

F.—Assets not hereinbefore Mentioned.

37. (a) Office furniture	\$423 15	
38. (b) Sundries	2,067 41	
		2,490 56

Total assets \$1,311,831 03

CASH ACCOUNT.

Receipts in Ontario only for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

2. (i) On hand	\$ 150 05	
3. (ii) In bank	6,929 57	

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—		
10. (i) Principal	46,040 15	
11. (ii) Interest	10,681 63	

D.—Receipts from Real Estate Owned Beneficially by the Corporation.

16. (a) Sales (not included in any of the foregoing items)	74,812 17	
17. (b) Rents	12,099 35	

G.—Receipts from other sources, viz.:

30. (a) Sundry amounts credited to Head Office, Glasgow	27 78	
(b) Sundries	869 29	
		\$151,609 98

Totals \$151,609 98

CASH ACCOUNT.—Continued.

Expenditure in Ontario only for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

(b) Loaned or invested in other securities, viz.:

1	(a) Loaned on mortgages of realty	68,176 00
	(i) Repairs, costs, etc., on property mortgaged to the Corporation	215 89
	(ii) Expenditure on property owned by the Corporation	7,247 77
	(c) Insurance or taxes advanced on property mortgaged to the Corporation	503 60

B.—Expended on Stock Account.

8	Dividends paid on permanent stock	566 31
---	-----------------------------------	--------

D.—Management Expenses (other than foregoing).

25	(a) Salaries, wages and fees	1,985 94
26	(b) Commission on sales	1,130 37
28	(d) Stationery, postage, printing and advertising, etc.	273 09
29	(c) Law costs	118 90
30	(f) Fuel, rent, taxes (other than 7 and 32) and rates	362 61
31	(g) Travelling expenses	9 00
32	(h) Registration fees	112 00

E.—Other Expenditures, viz.:

33	(a) Bills of Exchange remitted at Head Office	48,638 88
34	(b) Sundry accounts receivable	2,629 07
35	(c) Sundries	157 35

F.—Balance.

37	(a) Cash on hand and in banks	19,483 22
----	-------------------------------	-----------

Totals \$151,609 99

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, none; on debentures, none; on debenture stock, 4½ per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty in Ontario, about 6 per cent.; in Manitoba, about 7 per cent.; on other securities in Ontario, 5½ per cent.; in Manitoba, about 7 per cent.
7. Of the mortgages held by the Corporation \$201,864.72 is on realty situate in Ontario; and \$556,250.36 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation might be estimated at \$1,800,000.
11. How often are the securities held by the Corporation valued? At regular intervals. Annually in many cases; more frequently if necessary.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Accountant, \$2,000 by Guarantee Company.
13. When were the accounts of the Corporation last audited? 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). Moores, Carson and Watson, C.A., Glasgow, Scotland; John Maughan, Toronto; W. G. Nicholls, Winnipeg.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 13th April and 13th October. Rate 3 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 12th April, 1905.
17. Date of last Annual Meeting? 12th April, 1904.

THE FRONTENAC LOAN AND INVESTMENT SOCIETY.

Head Office, Kingston, Ont.

Incorporated under the Building Societies' Act, Consolidated Statutes of Upper Canada, chap. 53, by declaration filed with the Clerk of the Peace for the County of Frontenac, 13th August, 1863.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Frontenac Loan and Investment Society, of Kingston, Ontario, on the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 87 Clarence street, in the City of Kingston, in the Province of Ontario.

The Board is constituted of five directors, holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Sir Richard Cartwright, G.C.M.G., P.C., President, Kingston, Ont.; March, 1904; March, 1906.

R. Vashan Rogers, K.C., L.L.D., Vice-President, Kingston, Ont.; March, 1904; March, 1906.

Lieut.-Colonel Henry R. Smith, Director, Kingston, Ont.; March, 1903; March, 1905.

W. H. Moutray, Director, Stella, Ont.; March, 1904; March, 1906.

Lieut.-Colonel S. C. McGill, Managing Director, Kingston, Ont.; March, 1903; March, 1905.

A.—Permanent capital stock: total amount authorized, unlimited; total amount subscribed, \$200,000, as more particularly set out in Schedule A hereto:

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.	—		
ully called....	4,000	\$ 50	\$ 200,000	\$ 200,000	\$

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary Joint Stock Capital fully called: Total called	200,000 00	
\$200,000; total paid thereon	4,183 50	
4. (d) Dividends declared in respect of (1), but not yet paid ..	30,000 00	
5. (e) Reserve Fund in respect of (1)	6,749 49	
7. (g) Contingent fund in respect of (1)		\$240,932 99

Liabilities to the Public.

27. Deposits	171,704 47	
29. Debentures issued in Canada ..	14,000 00	
30. Interest due or accrued on (29) ..	245 83	
		185,950 30

Total Liabilities

\$426,883 29

BALANCE SHEET.—Continued.

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the Corporation.

1. (a) Office premises, situate as follows:—		
2. (i) At Kingston, Ont., held as freehold	\$4,473 16	
5. (b) Freehold land (including buildings) other than foregoing	35,211 58	
		\$39,684 74

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land ..	\$254,906 62	
10. (b) Debts secured by mortgaged land held for sale	42,215 41	
		297,122 03

C.—Debts not above enumerated for which the Corporation holds securities as follows:

16. (d) Debts secured by Loan Corporations' debentures	\$13,000 00	
20. (h) Debts secured only by permanent stock or shares of the Corporation	36,237 51	
22. (j) Deposit receipts, bonds, etc.	23,024 60	
		72,262 11

E.—Cash.

31. (a) Cash on hand	\$ 681 36	
32. (b) In banks	8,095 96	
		8,777 32

F.—Assets not hereinbefore Mentioned.

39. (c) Office furniture	\$ 192 09	
41. (e) Reserve Fund Investment	8,845 00	
		9,037 09
Total assets		\$426,883 29

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

			Total (Col. 4.)
2. (i) Cash (not already shown under (1)) :—			
3. (i) On hand	\$ 445 32		
(ii) In bank	5,471 50		
(iii) In agents' hands			\$5,916 82
			108 93

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—		
10. (i) Principal		51,434
(b) On other securities:—		
12. (i) Principal		12,034 15
13. (ii) Interest or dividends		1,188 48

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rents		692 34
---------------------	--	--------

F.—Borrowed Money.

26. (b) Borrowed by taking deposits		164,579 82
27. (c) Borrowed on debentures		7,500 00

G.—Receipts from other sources, viz.:

30. (a) Real estate, temporary advances		1,098 25
Totals		\$244,553 67

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	Total (Col. 4.)
1. (a) Loaned on mortgages of realty	\$12,294 72
(b) Loaned or invested in other securities	3,625 00

B.—Expended on Stock Account.

8. Dividend paid on permanent stock	8,047 50
---	----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits: Principal, \$193,792.27; interest, \$74.49	193,866 76
20. (c) Debentures issued in Canada: Principal, \$12,500; interest, \$706.70	13,206 70

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	3,112 00
26. (b) Commission or brokerage	57 18
28. (d) Stationery, postage, printing and advertising	105 89
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	270 17
32. (h) Registration fees	285 00

E.—Other Expenditures, viz.:

34. (a) Advanced on real estate	778 58
35. (b) Improvements and repairs	15 81
36. (c) Incidentals	13 80
37. (d) Conveyancing charges	97 24

F.—Balance.

37. (a) Cash on hand and in banks	8,777 32
Totals	\$244,553 67

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$6,500.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$5,000.00.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3 per cent.; on debentures 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, about 5 per cent. On other securities, 4.20 per cent.
7. Of the mortgages held by the Corporation, \$241,356.90 is on realty situate in Ontario, and \$55,765.13 on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation. \$420,000 approximately.
11. How often are the securities held by the Corporation valued? Careful valuation when loan is applied for and further valuation when considered necessary.
12. (a) What officers of the Corporation are under bond and for what sum respectively? All under bonds from \$5,000 down to \$2,000. Private sureties.
13. When were the accounts of the Corporation last audited? February, 1905. In progress.
14. Names and addresses of the auditors respectively for 1904. J. H. Birkett and R. J. Hooper. For 1905: Not yet appointed.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 5th January and 5th July. 4 per cent per annum.
16. What is the date appointed for the Annual Meeting? 15th March, 1905.
17. Date of last Annual Meeting? 16th March, 1904.

ESSEX COUNTY SAVINGS AND LOAN COMPANY.

Head Office, Windsor, Ontario.

Incorporated by Letters Patent of Ontario, dated September, 1902 (Lib. 51, No. 2). issued under The Loan Corporations Act, R.S.O., 1897, c. 205.

The lending and borrowing powers of the Company are derived from its Letters Patent and from R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the conditions and affairs of The Essex County Savings and Loan Company at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 16 Sandwich Street East, in the City of Windsor, in the Province of Ontario.

The Board is constituted of ten directors holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

John Curry, President, Windsor, Ont.;	8th Feb., 1904; 12th February, 1906.
M. A. McHugh, Vice-President, Windsor, Ont.;	23rd Sept., 1902; 13th Feb., 1905.
J. F. Smyth, Director, Windsor, Ont.;	8th Feb., 1904; 12th Feb. 1906
R. F. Sutherland, Director, Windsor, Ont.;	" "
John Davis, Director, Windsor, Ont.;	" "
Hon. J. O. Reaume, Director, Windsor, Ont.;	23rd Sept., 1902; 13th Feb., 1905
S. A. King, Director, Windsor, Ont.;	8th Feb., 1904; 12th Feb., 1906
George Bartlet, Director, Windsor, Ont.;	23rd Sept., 1902; 13th Feb., 1905
W. J. McKee, Director, Windsor, Ont.	" "
C. E. Casgrain, Director, Windsor, Ont.;	" "
F. H. Macpherson, Acting Manager Windsor, Ont.	

A.—Permanent Capital Stock: Total amount authorized \$1,000,000; total amount subscribed, \$308,200, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and Permanent Capital Stock created by virtue of Loan Corporations Act.

Description.	No. of shares.	Par value.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
2. Twenty per cent. called*	3,082	\$ 100	\$ 308,200	\$ 65,460	\$ 17,100

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

*Paid in advance of calls \$20,920, under by-law of the Company.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital 20 per cent. called; total called, \$61,640; total paid thereon	\$44,540 00	
4. (cc) Joint Stock Capital paid in advance of calls	20,920 00	
(With consent of Directors under Section 14 of By-laws.)		
5. (e) Unappropriated profits in respect of (1)	272 41	
6. (f) Reserve fund in respect of (1)	2,891 42	
		\$68,623 83

Liabilities to the Public. None.

Total liabilities	\$68,623 83
-------------------------	-------------

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts Secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land ..	\$62,439 01	
11. (c) Interest due or accrued on item 9 and not included therein...	2,321 83	
		\$64,760 84

C.—Debts above enumerated for which the Corporation holds security as follows:

14. (b) Debts secured by municipal bonds or debentures	3,028 07
--	----------

E.—Cash.

32. (b) In bank	834 92
	\$68,623 83

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

(Col. 1.) (Col. 3.) (Total Col. 4.)

A.—Balance from 31st December, 1903.

(b) Cash not already shown under (1):			
3. (ii) In bank	\$209 99		\$209 99
(aa) Joint Stock Capital received in advance of calls.		2,850 00	2,850 00

C.—Receipts on account of Investments, Loans or Debts.

(a) Mortgages of realty:			
10. (i) Principal	6,166 24		
11. (ii) Interest	3,172 79		9,339 03
G.—Receipts from other sources	159 63		159 63
Totals	\$9,708 65	\$2,850 00	\$12,558 65

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account			
A.—Sums Loaned or Invested on Capital Account.	(Col. 1.)	(Col. 3.)	(Col. 4.)
1. (a) Loaned on mortgages of realty		\$8,017 50	\$8,017 50
7. (e) Insurance and taxes advanced on property mortgaged to the Corporation	232 46		232 46
B.—Expended on Stock Account.			
8. Dividends paid on permanent stock	2,911 29		2,911 29
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:			
18. (a) Bank account (principal and interest)	6 41		6 41
D.—Management Expenses.			
28. (d) Stationery, postage, printing and advertising ..	556 07		556 07
F.—Balance.			
37. (a) Cash in bank	834 92		834 92
Totals	\$4,541 15	\$8,017 50	12,558 65

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905, exclusive of deposits. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$9,178.21.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits. None. On debentures. None.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 5.32 per cent.; on securities 4½ per cent.
7. Of the mortgages held by the Corporation all are on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number of aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation during 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$178,280.00.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sums respectively? None pending the appointment of a permanent manager.
13. When were the accounts of the Corporation last audited? 27th January, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed.)
For 1904: F. H. Macpherson, F.C.A., and James Neilson, C.A., Windsor.
For 1905: F. H. Macpherson, F.C.A.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? 30th June and 31st December, 4½ per cent. for each.
16. What is the date appointed for the Annual Meeting? Second Monday in February.
17. Date of last Annual Meeting? 8th February, 1904.

II. LOAN COMPANIES.

B. COMPANIES HAVING TERMINATING AS WELL AS PERMANENT
STOCK, OR HAVING TERMINATING STOCK ONLY.

(SEE 4 EDW. VII (1904) CHAPTER 17, SECTION 6).

DETAILED REPORTS OF THE SEVERAL COMPANIES.

THE CANADIAN BIRKBECK INVESTMENT AND SAVINGS COMPANY.

Head Office: Toronto, Ont.

Incorporated under special Act of Canada, 62-3 Vict. c. 103. (Dec. Book II. 92)

ANNUAL STATEMENT

of the condition and affairs of the Canadian Birkbeck Investment and Savings Company, at Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, and to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the Act of the said Province.

The Head Office of the Corporation is at Nos. 54-56 Victoria Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of six directors holding office for one year, the names and chief executive officers of the Corporation on the 31st December, 1904, are as follows, together with their respective terms of office:

W. P. Birkbeck, President, Toronto.	1st January 1904 to 31st December 1904
W. P. Birkbeck, Vice-President, Toronto.	" " " " " "
W. P. Birkbeck, Vice-President, Montreal.	" " " " " "
W. P. Birkbeck, Director, Toronto.	" " " " " "
W. P. Birkbeck, Director, Toronto.	" " " " " "
W. P. Birkbeck, Managing Director, Toronto.	" " " " " "

The Corporation has a capital stock of \$1,000,000, divided into 100,000 shares of \$10 each, and has a reserve fund of \$100,000, as more particularly set out in Schedule A hereof.

SCHEDULE A

Statement of the Assets and Liabilities of the Corporation as at the 31st December 1904.

Assets	Liabilities
Capital Stock	100,000
Reserve Fund	100,000
Investments	1,000,000
Receivables	100,000
Payables	100,000
Other Assets	100,000
Total	1,400,000

Statement of the Income and Expenses of the Corporation for the year ending 31st December 1904.

SCHEDULE B

Income	Expenses
Interest on Investments	100,000
Dividends	100,000
Other Income	100,000
Total	300,000
Salaries and Wages	100,000
Depreciation	100,000
Other Expenses	100,000
Total	300,000

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital full called: Total called, \$514,500; total paid thereon	\$514,500 00	
2. (b) Ordinary joint stock capital, 50 per cent. called: Total called, \$258,200; total paid thereon	258,200 00	
Profits accrued or (2) credited but not yet paid	7,595 92	
4. (d) Dividend declared in respect of (1) and (2) but not yet paid..	22,604 58	
8. (h) Instalment permanent stock (payable by fixed periodical payments); total subscribed, \$334,000, on which has been paid	106,520 68	
9. (i) Dividends declared on (8) but not yet paid.....	5,448 81	
Dividends unclaimed	12 00	
		\$914,881 99

B.—Terminating Capital Stock or Shares.

17. (d) Prepaid stock less shown in (24); Total in force, 299 shares at \$40 per share, on which has been paid into Loan Fund..	\$11,960 00	
18. (e) Profits or accrued interest on (17) less shown in (25) credited or appropriated but not yet paid	4,325 45	
19. (f) Profits on accrued interest on (17) less shown in (25) not credited or appropriated	977 10	
20. (g) Instalment stock less shown in (24) total issue now in force, 3,861 shares at \$100 per share, \$386,100, on which has been paid in all \$181,072.81, of which sum there has been paid into Loan Fund	177,637 01	
22. (i) Profits or accrued interest on (20) and Sinking Fund less shown in (25) and not credited or appropriated	25,033 74	
24, 25. Liability in respect of terminating stock or shares (Fully paid, Prepaid, or Instalment, other than shown in (14), (17) and (20) as to which the Corporation has received notice of withdrawal, but at 31st December, 1904, had not paid off: viz.:		
24. Principal sum due by Corporation	3,435 80	
25. Interest, profits or dividends due by Corporation	1,642 09	
		225,011 19

C.—Liabilities to Shareholders other than as already shown under A or B.

26. Reserve Fund	75,000 00	
Contingent Fund	7,000 00	
		82,000 00
		\$1,221,893 18

Liabilities to the Public.

29. Debentures issued in Canada	\$100,600 00	
30. Interest due and accrued on (29)	20 00	
31. Debentures issued elsewhere than in Canada	33,871 85	
32. Interest due and accrued	186 50	
39. Due on loans in process of completion	75,650 00	
40. Other liabilities to the public, viz.:		
41. (a) Mortgage reserve	166,771 01	
42. Sundry creditors	2,111 01	
		379,210 37
Total liabilities		\$1,601,103 55

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:		
2. (i) At Toronto, held in freehold to be used as office premises, property account	\$35,000 00	
Less mortgage assumed	17,500 00	
		\$17,500 00
		\$17,500 00

THE CANADIAN BIRKBECK INVESTMENT AND SAVINGS COMPANY.

Head Office: Toronto, Ont.

Incorporated under special Act of Canada, 62-3 Vict. c. 103. (Dec. Book II., 92.)

ANNUAL STATEMENT

Of the condition and affairs of the Canadian Birkbeck Investment and Savings Company, of Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at Nos. 54-66 Victoria Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of six directors holding office for one year.

The directors and chief executive officers of the Corporation on the 31st December, 1904, were as follows, together with their respective terms of office:

H. P. Dwight, President, Toronto;	1st January, 1904; December, 1904.
Thomas Long, Vice-President, Toronto;	" "
S. H. Ewing, Vice-President, Montreal;	" "
Stapleton Caldecott, Director, Toronto;	" "
W. E. Wellington, Director, Toronto;	" "
F. W. G. Fitzgerald, Managing Director, Toronto;	" "

A.—Permanent capital stock: Total amount authorized. \$5,000,000; total amount subscribed, \$1,364,900, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.	—		
		\$	\$	\$ c.	
1. Fully called.....	5,145	100	514,500	514,500 00	.....
2. Partly called	5,164	100	516,400	258,200 00	.....
Instalment shares ..	3,840	100	384,000	106,520 68	.....
Totals	13,649	.....	1,364,900	879,220 68	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

SCHEDULE B.

		Prepaid.		Instalment.		Total.
		No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.			\$		\$	\$
Number and amount in force 31st December, 1903.....		350	35,000	5,462	546,200	581,200
" issued during 1904						
Gross total in force at any time in 1904.....		350	35,000	5,462	546,200	581,200
	No. of shares.					
	Amount.					
Deduct as follows:			\$			
Prepaid, withdrawn and paid off during 1904.....		51	5,100			
Instalments withdrawn, lapsed and paid off during 1904.....		1,382	138,200			
Converted into permanent stock during 1904 ..		219	21,900			
Total deductions		51	5,100	51	5,100	165,200
		1,601	160,100			
Net total remaining in force at 31st December, 1904		299	29,900	3,861	386,100	416,000

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital full called: Total called, \$514,500; total paid thereon	\$514,500 00	
2. (b) Ordinary joint stock capital, 50 per cent. called: Total called, \$258,200; total paid thereon	258,200 00	
Profits accrued or (2) credited but not yet paid	7,595 92	
4. (d) Dividend declared in respect of (1) and (2) but not yet paid..	22,604 58	
8. (h) Instalment permanent stock (payable by fixed periodical payments); total subscribed, \$334,000, on which has been paid	106,520 68	
9. (i) Dividends declared on (8) but not yet paid.....	5,448 81	
Dividends unclaimed	12 00	
		\$914,881 99

B.—Terminating Capital Stock or Shares.

17. (d) Prepaid stock less shown in (24); Total in force, 299 shares at \$40 per share, on which has been paid into Loan Fund..	\$11,960 00	
18. (e) Profits or accrued interest on (17) less shown in (25) credited or appropriated but not yet paid	4,325 45	
19. (f) Profits on accrued interest on (17) less shown in (25) not credited or appropriated	977 10	
20. (g) Instalment stock less shown in (24) total issue now in force, 3,861 shares at \$100 per share, \$386,100, on which has been paid in all \$181,072.81, of which sum there has been paid into Loan Fund	177,637 01	
22. (i) Profits or accrued interest on (20) and Sinking Fund less shown in (25) and not credited or appropriated	25,033 74	
24, 25. Liability in respect of terminating stock or shares (Fully paid, Prepaid, or Instalment, other than shown in (14), (17) and (20) as to which the Corporation has received notice of withdrawal, but at 31st December, 1904, had not paid off: viz.:		
24. Principal sum due by Corporation	3,435 80	
25. Interest, profits or dividends due by Corporation	1,642 09	
		225,011 19

C.—Liabilities to Shareholders other than as already shown under A or B.

26. Reserve Fund	75,000 00	
Contingent Fund	7,000 00	
		82,000 00
		\$1,221,893 18

Liabilities to the Public.

29. Debentures issued in Canada	\$100,600 00	
30. Interest due and accrued on (29)	20 00	
31. Debentures issued elsewhere than in Canada	33,871 85	
32. Interest due and accrued	186 50	
39. Due on loans in process of completion	75,650 00	
40. Other liabilities to the public, viz.:		
41. (a) Mortgage reserve	166,771 01	
42. Sundry creditors	2,111 01	
		379,210 37
Total liabilities		\$1,601,103 55

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:		
2. (i) At Toronto, held in freehold to be used as office premises, property account	\$35,000 00	
Less mortgage assumed	17,500 00	
		\$17,500 00
		\$17,500 00

THE CANADIAN BIRKBECK INVESTMENT AND SAVINGS COMPANY.

Head Office: Toronto, Ont.

Incorporated under special Act of Canada, 62-3 Vict. c. 103. (Dec. Book II., 92.)

ANNUAL STATEMENT

Of the condition and affairs of the Canadian Birkbeck Investment and Savings Company, of Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at Nos. 54-66 Victoria Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of six directors holding office for one year.

The directors and chief executive officers of the Corporation on the 31st December, 1904, were as follows, together with their respective terms of office:

H. P. Dwight, President, Toronto;	1st January, 1904; December, 1904.
Thomas Long, Vice-President, Toronto;	" "
S. H. Ewing, Vice-President, Montreal;	" "
Stapleton Caldecott, Director, Toronto;	" "
W. E. Wellington, Director, Toronto;	" "
F. W. G. Fitzgerald, Managing Director, Toronto;	" "

A.—Permanent capital stock: Total amount authorized, \$5,000,000; total amount subscribed, \$1,364,900, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.	—		
		\$	\$	\$ c.	
1. Fully called.....	5,145	100	514,500	514,500 00	
2. Partly called	5,164	100	516,400	258,200 00	
Instalment shares..	3,840	100	384,000	106,520 68	
Totals	13,649		1,364,900	879,220 68	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

SCHEDULE B.

			Prepaid.		Instalment.		Total.
			No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.				\$		\$	\$
Number and amount in force 31st December, 1903.....			350	35,000	5,462	546,200	581,200
" issued during 1904.....							
Gross total in force at any time in 1904.....			350	35,000	5,462	546,200	581,200
			No. of shares.	Amount.			
Deduct as follows:				\$			
Prepaid, withdrawn and paid off during 1904.			51	5,100			
Instalments withdrawn, lapsed and paid off during 1904.....			1,382	138,200			
Converted into permanent stock during 1904.			219	21,900			
Total deductions.....			51 1,601	5,100 160,100	51	5,100 1,601	165,200
Net total remaining in force at 31st December, 1904.....			299	29,900	3,861	386,100	416,000

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital full called: Total called, \$514,500; total paid thereon	\$514,500 00	
2. (b) Ordinary joint stock capital, 50 per cent. called: Total called, \$258,200; total paid thereon	258,200 00	
Profits accrued or (2) credited but not yet paid	7,595 92	
4. (d) Dividend declared in respect of (1) and (2) but not yet paid..	22,604 58	
8. (h) Instalment permanent stock (payable by fixed periodical payments); total subscribed, \$334,000, on which has been paid	106,520 68	
9. (i) Dividends declared on (8) but not yet paid	5,448 81	
Dividends unclaimed	12 00	
		\$914,881 99

B.—Terminating Capital Stock or Shares.

17. (d) Prepaid stock less shown in (24); Total in force, 299 shares at \$40 per share, on which has been paid into Loan Fund..	\$11,960 00	
18. (e) Profits or accrued interest on (17) less shown in (25) credited or appropriated but not yet paid	4,325 45	
19. (f) Profits on accrued interest on (17) less shown in (25) not credited or appropriated	977 10	
20. (g) Instalment stock less shown in (24) total issue now in force, 3,861 shares at \$100 per share, \$386,100, on which has been paid in all \$181,072.81, of which sum there has been paid into Loan Fund	177,637 01	
22. (i) Profits or accrued interest on (20) and Sinking Fund less shown in (25) and not credited or appropriated	25,033 74	
24, 25. Liability in respect of terminating stock or shares (Fully paid, Prepaid, or Instalment, other than shown in (14), (17) and (20) as to which the Corporation has received notice of withdrawal, but at 31st December, 1904, had not paid off: viz.:		
24. Principal sum due by Corporation	3,435 80	
25. Interest, profits or dividends due by Corporation	1,642 09	
		225,011 19

C.—Liabilities to Shareholders other than as already shown under A or B.

26. Reserve Fund	75,000 00	
Contingent Fund	7,000 00	
		82,000 00
		\$1,221,893 18

Liabilities to the Public.

29. Debentures issued in Canada	\$100,600 00	
30. Interest due and accrued on (29)	20 00	
31. Debentures issued elsewhere than in Canada	33,871 85	
32. Interest due and accrued	186 50	
39. Due on loans in process of completion	75,650 00	
40. Other liabilities to the public, viz.:		
41. (a) Mortgage reserve	166,771 01	
42. Sundry creditors	2,111 01	
		379,210 37
Total liabilities		\$1,601,103 55

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:		
2. (i) At Toronto, held in freehold to be used as office premises, property account	\$35,000 00	
Less mortgage assumed	17,500 00	
		\$17,500 00
		\$17,500 00

THE CANADIAN BIRKBECK INVESTMENT AND SAVINGS COMPANY.

Head Office: Toronto, Ont.

Incorporated under special Act of Canada, 62-3 Vict. c. 103. (Dec. Book II., 92.)

ANNUAL STATEMENT

Of the condition and affairs of the Canadian Birkbeck Investment and Savings Company, of Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at Nos. 54-66 Victoria Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of six directors holding office for one year.

The directors and chief executive officers of the Corporation on the 31st December, 1904, were as follows, together with their respective terms of office:

H. P. Dwight, President, Toronto;	1st January, 1904; December, 1904.
Thomas Long, Vice-President, Toronto;	" "
S. H. Ewing, Vice-President, Montreal;	" "
Stapleton Caldecott, Director, Toronto;	" "
W. E. Wellington, Director, Toronto;	" "
F. W. G. Fitzgerald, Managing Director, Toronto;	" "

A.—Permanent capital stock: Total amount authorized. \$5,000,000; total amount subscribed, \$1,364,900, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.	—		
		\$	\$	\$ c.	
1. Fully called.....	5,145	100	514,500	514,500 00	.....
2. Partly called	5,164	100	516,400	258,200 00	.....
Instalment shares ..	3,340	100	384,000	106,520 68	.....
Totals	13,649	.....	1,364,900	879,220 68	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

SCHEDULE B.

		Prepaid.		Instalment.		Total.
		No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.			\$		\$	\$
Number and amount in force 31st December, 1903.....		350	35,000	5,462	546,200	581,200
“ issued during 1904.....						
Gross total in force at any time in 1904.....		350	35,000	5,462	546,200	581,200
		No. of shares.	Amount.			
			\$			
Deduct as follows:						
Prepaid, withdrawn and paid off during 1904.....		51	5,100			
Instalments withdrawn, lapsed and paid off during 1904.....		1,382	138,200			
Converted into permanent stock during 1904 ..		219	21,900			
Total deductions		51	5,100	51	5,100	165,200
		1,601	160,100		160,100	
Net total remaining in force at 31st December, 1904		299	29,900	3,861	386,100	416,000

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital full called: Total called, \$514,500; total paid thereon	\$514,500 00	
2. (b) Ordinary joint stock capital, 50 per cent. called: Total called, \$258,200; total paid thereon	258,200 00	
Profits accrued or (2) credited but not yet paid	7,595 92	
4. (d) Dividend declared in respect of (1) and (2) but not yet paid..	22,604 58	
8. (h) Instalment permanent stock (payable by fixed periodical payments); total subscribed, \$334,000, on which has been paid	106,520 68	
9. (i) Dividends declared on (8) but not yet paid.....	5,448 81	
Dividends unclaimed	12 00	
		\$914,881 99

B.—Terminating Capital Stock or Shares.

17. (d) Prepaid stock less shown in (24); Total in force, 299 shares at \$40 per share, on which has been paid into Loan Fund..	\$11,960 00	
18. (e) Profits or accrued interest on (17) less shown in (25) credited or appropriated but not yet paid	4,325 45	
19. (f) Profits on accrued interest on (17) less shown in (25) not credited or appropriated	977 10	
20. (g) Instalment stock less shown in (24) total issue now in force, 3,361 shares at \$100 per share, \$336,100, on which has been paid in all \$181,072.81, of which sum there has been paid into Loan Fund	177,637 01	
22. (i) Profits or accrued interest on (20) and Sinking Fund less shown in (25) and not credited or appropriated	25,033 74	
24, 25. Liability in respect of terminating stock or shares (Fully paid, Prepaid, or Instalment, other than shown in (14), (17) and (20) as to which the Corporation has received notice of withdrawal, but at 31st December, 1904, had not paid off: viz.:		
24. Principal sum due by Corporation	3,435 80	
25. Interest, profits or dividends due by Corporation	1,642 09	
		225,011 19

C.—Liabilities to Shareholders other than as already shown under A or B.

26. Reserve Fund	75,000 00	
Contingent Fund	7,000 00	
		82,000 00
		\$1,221,893 18

Liabilities to the Public.

29. Debentures issued in Canada	\$100,600 00	
30. Interest due and accrued on (29)	20 00	
31. Debentures issued elsewhere than in Canada	33,871 85	
32. Interest due and accrued	186 50	
39. Due on loans in process of completion	75,650 00	
40. Other liabilities to the public, viz.:		
41. (a) Mortgage reserve	166,771 01	
42. Sundry creditors	2,111 01	
		379,210 37
Total liabilities		\$1,601,103 55

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:		
2. (i) At Toronto, held in freehold to be used as office premises, property account	\$35,000 00	
Less mortgage assumed	17,500 00	
		\$17,500 00
		\$17,500 00

THE CANADIAN BIRKBECK INVESTMENT AND SAVINGS COMPANY.

Head Office: Toronto, Ont.

Incorporated under special Act of Canada, 62-3 Vict. c. 103. (Dec. Book II., 92.)

ANNUAL STATEMENT

Of the condition and affairs of the Canadian Birkbeck Investment and Savings Company, of Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at Nos. 54-66 Victoria Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of six directors holding office for one year.

The directors and chief executive officers of the Corporation on the 31st December, 1904, were as follows, together with their respective terms of office:

H. P. Dwight, President, Toronto;	1st January, 1904; December, 1904.
Thomas Long, Vice-President, Toronto;	" "
S. H. Ewing, Vice-President, Montreal;	" "
Stapleton Caldecott, Director, Toronto;	" "
W. E. Wellington, Director, Toronto;	" "
F. W. G. Fitzgerald, Managing Director, Toronto;	" "

A.—Permanent capital stock: Total amount authorized, \$5,000,000; total amount subscribed, \$1,364,900, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the corporation.
	No. of shares.	Par value of shares.	—		
		\$	\$	\$ c.	
1. Fully called.....	5,145	100	514,500	514,500 00	.....
2. Partly called	5,164	100	516,400	258,200 00	.....
Instalment shares.....	3,340	100	334,000	106,520 68	.....
Totals	13,649	.....	1,364,900	879,220 68	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

SCHEDULE B.

	Prepaid.		Instalment.		Total.
	No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.		\$		\$	\$
Number and amount in force 31st December, 1903.....	350	35,000	5,462	546,200	581,200
" issued during 1904					
Gross total in force at any time in 1904.....	350	35,000	5,462	546,200	581,200
	No. of shares.	Amount.			
Deduct as follows:		\$			
Prepaid, withdrawn and paid off during 1904.....	51	5,100			
Instalments withdrawn, lapsed and paid off during 1904.....	1,382	138,200			
Converted into permanent stock during 1904.....	219	21,900			
Total deductions	1,652	165,100	51	5,100	165,200
Net total remaining in force at 31st December, 1904.....	299	29,900	3,861	386,100	416,000

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital full called: Total called, \$514,500; total paid thereon	\$514,500 00	
2. (b) Ordinary joint stock capital, 50 per cent. called: Total called, \$258,200; total paid thereon	258,200 00	
Profits accrued or (2) credited but not yet paid	7,595 92	
4. (d) Dividend declared in respect of (1) and (2) but not yet paid.	22,604 58	
8. (h) Instalment permanent stock (payable by fixed periodical payments); total subscribed, \$334,000, on which has been paid	106,520 68	
9. (i) Dividends declared on (8) but not yet paid.	5,448 81	
Dividends unclaimed	12 00	
		\$914,881 99

B.—Terminating Capital Stock or Shares.

17. (d) Prepaid stock less shown in (24); Total in force, 299 shares at \$40 per share, on which has been paid into Loan Fund.	\$11,960 00	
18. (e) Profits or accrued interest on (17) less shown in (25) credited or appropriated but not yet paid	4,325 45	
19. (f) Profits on accrued interest on (17) less shown in (25) not credited or appropriated	977 10	
20. (g) Instalment stock less shown in (24) total issue now in force, 3,361 shares at \$100 per share, \$336,100, on which has been paid in all \$181,072.81, of which sum there has been paid into Loan Fund	177,637 01	
22. (i) Profits or accrued interest on (20) and Sinking Fund less shown in (25) and not credited or appropriated	25,033 74	
24, 25. Liability in respect of terminating stock or shares (Fully paid, Prepaid, or Instalment, other than shown in (14), (17) and (20) as to which the Corporation has received notice of withdrawal, but at 31st December, 1904, had not paid off: viz.:		
24. Principal sum due by Corporation	3,435 80	
25. Interest, profits or dividends due by Corporation	1,642 09	
		225,011 19

C.—Liabilities to Shareholders other than as already shown under A or B.

26. Reserve Fund	75,000 00	
Contingent Fund	7,000 00	
		82,000 00
		\$1,221,893 18

Liabilities to the Public.

29. Debentures issued in Canada	\$100,600 00	
30. Interest due and accrued on (29)	20 00	
31. Debentures issued elsewhere than in Canada	33,871 85	
32. Interest due and accrued	186 50	
39. Due on loans in process of completion	75,650 00	
40. Other liabilities to the public, viz.:		
41. (a) Mortgage reserve	166,771 01	
42. Sundry creditors	2,111 01	
		379,210 37
Total Liabilities		\$1,601,103 55

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:		
2. (i) At Toronto, held in freehold to be used as office premises, property account	\$35,000 00	
Less mortgage assumed	17,500 00	
		\$17,500 00
		\$17,500 00

BALANCE SHEET AS AT 31ST DECEMBER, 1904.—Continued.

Cr.

Assets.—Continued.

B.—Debts secured by mortgages of land.

9. (a) Debts (other than item 10) secured by mortgages of land ..	1,343,843 40	
10. (b) Debts secured by mortgaged land held for sale ..	27,232 66	
10. (b5) Debts secured by land held by the Company as Mortgagee in possession, or secured by land for the rents and profits of which the Company is accountable ..	40,764 00	
11. (c) Interest due and accrued on items 9 and 10 and not included therein ..	40,720 79	
		1,452,560 83

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured by permanent stock or shares of the Corporation ..	\$7,437 56	
21. (i) Debts secured only by terminating stock or shares of the Corporation ..	2,305 00	
22. (j) Debts secured by fully paid stocks and bonds ..	100,462 50	
		110,205 06

E.—Cash.

31. (a) On hand ..	\$970 01	
32. (b) In bank in Canada ..	2,178 48	
In bank in England ..	1,446 69	
		4,595 18

F.—Assets not hereinbefore mentioned.

37. (a) Office furniture ..	1,453 00	
38. (b) Due on permanent stock ..	11,843 49	
39. (c) Sundry debtors ..	2,945 97	
		16,242 46
Total assets ..		\$1,601,103 55

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

	(Col. 1.)	(Col. 2.)	(Col. 3.)	(Col. 4.)
2. (i) On hand ..	\$23,055 52			\$23,055 52
3. (ii) In bank ..				

B.—Sums received wholly or partly on Capital Stock.

6. (c) Sales of fully paid building society stock ..			36,088 75	36,088 75
8. (e) Dues on instalment building society stock ..		22,112 46	18,072 97	40,185 43
9. (f) Premiums on (6), and (8) ..	3,612 00			3,612 00

C.—Receipts on account of investments, loans or debts.

(a) Mortgages of Realty:—

10. (i) Principal ..		149,971 59	149,971 59
11. (ii) Interest ..	96,667 45		96,667 45
(b) On other securities:—			
12. (i) Principal ..		12,860 25	12,860 25
13. (ii) Interest or dividends ..	293 97		293 97

CASH ACCOUNT.—Continued.

Receipts for the year ending 31st December, 1904.

	(Col. 1.)	(Col. 2.)	(Col. 3.)	(Col. 4.)
D.—Receipts from Real Estate Owned Beneficially by Corporation.				
16. (a) Sales			2,475 65	2,475 65
17. (b) Rents	7,604 52			7,604 52
E.—Miscellaneous.				
18. (a) Commission, brokerage, etc.	2,497 70			2,497 70
22. (e) Lapses	85 97			85 97
24. (g) Conversion of terminating stock into permanent stock			12,964 54	12,964 54
F.—Borrowed Money.				
27. (c) Borrowed on debentures		19,707 99		19,707 99
G.—Receipts from other sources, viz:				
30. (a) Insurance premiums \$12,423.33				
(b) Taxes, repairs and legal charges, \$1,138.53				
(c) Insurance loss	5,309 39			
(d) Unclaimed dividends		66 00		
(e) Agents, \$85.19; Sundry creditors, \$407.50				
(f) Transfer fees, \$36.00	36 00		14,054 55	19,465 94
	\$139,162 52	\$41,886 45	\$246,488 30	\$427,537 27

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

Expended on Corporation Account.				
A.—Sums Loaned or Invested on Capital Account.				
1. (a) Loaned on mortgages of realty			\$243,359 41	\$243,359 41
(b) Loaned or invested in other securities:				
3. (ii) Call loans			11,600 00	11,600 00
4. (iii) Bonds			462 50	462 50
5. (iv) Stock Loans			1,000 00	1,000 00
7. (e) Insurance or taxes advanced on property mortgaged to the Corporation			25,615 74	25,615 74
B.—Expended on Stock Account.				
Dividends paid on permanent stock	43,076 90			43,076 90
11. Paid for terminating stock withdrawn ..		50,045 78		50,045 78
12. Profits paid on (11)	630 24			630 24
15. Terminating stock lapsed		85 97		85 97
16. Terminating stock converted into permanent		12,964 54		12,964 54
C.—Borrowed Money (other than foregoing) or Interest thereon paid, viz:				
20. (c) Debentures issued in Canada: Principal, \$1,500; interest, \$48.82	48 82	1,500 00		1,548 82
21. (d) Debentures issued elsewhere, Interest,	759 15			759 15
D.—Management Expenses (other than foregoing).				
25. (b) Salaries and fees	16,138 93			
26. (c) Commission or brokerage	4,940 90			
28. (d) Stationery, postage, printing and advertising	2,166 07			
29. (e) Law costs	644 66			
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	2,456 81			
31. (g) Travelling expenses	2,327 31			
32. (h) Registration fees	200 00			
33. (i) Other management expenditure	163 99			
				29,038 67

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

E.—Other Expenditure, viz.:	(Col. 1.)	(Col' 2.)	(Col. 3.)	(Col. 4)
34. (a) Exchange, \$396.20; office furniture, \$55; discount, 5/c	796 77		55 00	451 77
35. (b) Real estate maintenance	1,231 18			1,231 18
36. (c) Fire loss, \$925.17; agents, \$53.25; un-claimed dividends	93 00		978 42	1,071 42
E.—Balance.				
37. (a) Cash on hand and in bank				4,595 18
Totals	\$75,274 73	\$64,596 29	\$283,071 07	\$427,537 27

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$13,125.00. Not including loans on monthly payment plan.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, nil; on debentures, 4 per cent.; on debenture stock—.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 9 per cent.; on other securities, 4½ per cent.
7. Of the mortgages held by the Corporation \$167,350.00 is on realty situate in Ontario, and \$1,203,726.06 is on realty situated elsewhere.
8. Loans written off or transferred to real estate account during 1904, 9—\$11,779.31.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904, number 12; amount \$12,600.00.
10. Aggregate market value of the land mortgaged to the Corporation, estimated approximately at \$2,464,064.00.
11. How often are the securities held by the Corporation valued? Re-valued in all doubtful cases.
12. (a) what officers of the Corporation are under bond and for what sum respectively? Manager, \$4,000; Agents and Local Treasurers having collection and custody of Company's money in sums varying from \$200 to \$1,000. By approved private sureties.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed.) For 1904: George D. Perry and A. C. McConnell, Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 1st January and 1st July.
16. What is the date appointed for the Annual Meeting? First Wednesday in February.
17. Date of last Annual Meeting? 9th March, 1904.

COLONIAL INVESTMENT AND LOAN COMPANY.

Head Office, Toronto.

Incorporated under special Act of Canada, 63-4 V. c. 95.

ANNUAL STATEMENT

Of the condition and affairs of the Colonial Investment and Loan Company, of Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is No. 49 Wellington street east, in the City of Toronto, in the Province of Ontario.

The Board is constituted of five directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

George H. Gooderham, President, Toronto, Ont.,	14th June, 1904;	13th June, 1905
A. J. Jackson, Vice-President, Toronto, Ont.;	"	"
Henry O'Hara, Vice-President, Toronto, Ont.	"	"
J. H. Mitchell, Director, Toronto, Ont.;	"	"
E. A. Badenach, Director, Toronto, Ont.;	"	"
A. J. Jackson, Manager, Toronto,	"	"
J. H. Mitchell, Secretary, Toronto, Ont.;	"	"

A.—Permanent capital stock: Total amount authorized, \$5,000,000; Permanent Preference, \$4,900,000; Ordinary Permanent, \$100,000; total amount subscribed, Permanent Preference, \$2,456,780.00; Ordinary Permanent, \$100,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and Permanent capital stock created by virtue of Joint Stock Companies Acts or Private Acts.

Description.	No. of shares.	Par value.	Total amount held.	Total amount paid thereon.	Total remain- ing unpaid.
		\$	\$ c.	\$ c.	\$ c.
1. Fully called permanent preference	245,678	10	2,456,780 00	2,383,617 20	73,162 80
2. Partly called ordinary permanent	10,000	10	100,000 00	10,000 00	90,000 00
Total	255,678	—	2,556,780 00	2,393,617 20	163,162 80

SCHEDULE B.

Terminating or Withdrawable Stock.

Shares of terminating or withdrawable stock.	Prepaid.		Instalment.		Total.
	No.	Amount.	No.	Amount.	
Number and amount in force 31st December, 1903.....	931	\$ 93,100	4,274	\$ 427,400	\$ 520,500
Gross total in force at any time in 1904	931	93,100	4,274	427,400	520,500
Deduct as follows:					
Withdrawn and paid off during 1904.....			710	71,000	71,000
Matured			702	70,200	70,200
Retired by the Corporation	931	93,100	9	900	94,000
Forfeited or lapsed during 1904			41	4,400	4,400
Total deduction	931	93,100	1,465	146,500	239,600
Net total remaining in force at 31st December, 1904			2,809	281,900	280,900

Summary of Terminating or Withdrawable Stock in force 31st December, 1904.

2,809 shares instalment stock at \$100 per share, \$280,900, on which 489 shareholders have paid in	\$173,512 19
Total amount distributed or credited on terminating or withdrawable stock in 1904:	
Dividend of 6 per cent. on ordinary instalment stock	7,568 84
reduced payment stock	1,450 17
	\$9,019 01

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Permanent preference stock capital fully called: Total paid thereon	\$2,383,617 20	
2. (b) Ordinary joint stock capital .. called: Total paid thereon	10,000 00	
4. (d) Dividends declared in respect of (1) and (2), but not yet paid.	71,609 78	
5. (e) Unappropriated profits in respect of (1) and (2)	2,444 53	
6. (f) Reserve fund in respect of (1) and (2)	100,000 00	
7. (g) Real estate reserve fund	19,299 89	
		\$2,586,971 40

B.—Terminating Capital Stock or Shares.

20. (g) Instalment stock, less shown in (24), total issue now in force. 2,809 shares at 60 and 30 cents per share of \$100, on which has been paid in all \$, of which sum there has been paid into loan fund, including 1904 dividend	173,512 19	173,512 19
---	------------	------------

C.—Liability to Stockholders or Shareholders other than
already shown under A or B, viz.:

26. Borrowers' Guarantee Fund	12,679 14	
		\$2,773,162 73

Liabilities to the Public.

27. Deposits	63 28	
29. Debentures issued in Canada	18,500 00	
30. Interest due and accrued on (29)	426 00	
40. Other liabilities to public, viz.:		
41. (a) Balance payable	1,395 87	
42. (b) Principal repaid new loaning plans	469,706 50	
		490,091 65
Total liabilities		\$3,263,254 38

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the
Corporation.

7. (d) Real estate	\$177,012 19	\$177,012 19
B.—Debts secured by mortgages of land.		
9. (a) Debts (other than item 10) secured by mortgages of land * ..	\$2,436,865 35	
10. (b) Debts secured by mortgaged land held for sale	96,001 77	
11. (c) Interest due or accrued on item 9 and not included therein ..	14,778 02	
Insurance premiums, taxes, etc.	37,244 82	
		\$2,584,189 96

C.—Debts not above enumerated for which the Corporation
holds securities as follows:

14. (b) Debts secured by municipal bonds or debentures	17,759 24	
19. (g) Debts secured by stock call loans	162,714 00	
20. (h) Debts secured only by permanent stock or shares of the Cor- poration	10,430 58	
21. (i) Debts secured only by terminating stock or shares of the Corporation	2,635 00	
22. (j) Stocks owned by Company	47,894 50	
		241,433 32

E.—Cash.

32. (b) In banks and Trust Co.	232,234 60	
-------------------------------------	------------	--

F.—Assets not hereinbefore mentioned.

39. (c) Office furniture and plans	5,943 96	
40. (d) Interest current for month of December, 1904	11,451 33	
42. (f) Balances receivable	10,988 32	
		28,383 61

Total assets		\$3,263,254 38
--------------------	--	----------------

* Including premiums on assets purchased less amount written off.

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

	(Col. 1.)	(Col. 2.)	(Col. 3.)	(Total Col. 4.)
A.—Balance 31st December, 1903.				
1. (a) Capital account				\$309,762 23
B.—Sums received Wholly or Partly on Capital Stock.				
4. (a) Calls on permanent preference stock			\$17,938 90	
8. (e) Dues on instalment Building Society stock, including 1903-4 dividend		\$29,442 13		
C.—Receipts on account of Investments, Loans or Debts.				
Insurance premiums, taxes, etc.		17,358 17		
(a) On mortgages of realty:				
10 (i) Principal, including transfers to real estate		602,557 56		
11 (ii) Interest, including December, 1904, accretions	\$118,607 56			
(b) On other securities:				
12. (i) Principal: share loans		61,121 03		
13. (ii) Call loans		61,750 00		
(iii) Sale of stocks		38,751 24		
(c) Unsecured debts:				
14. New loaning plans		453,046 64		
15. Repayment in arrears		64,647 69		
Interest on straight loans and on arrears, etc.		25,458 23		
E.—Miscellaneous.				
18. (a) Expense instalment stock	3,722 03			
19. (b) Dividend on withdrawn Instalment stock		40 17		
21. (d) Fines, transfer and withdrawal fees.		834 45		
22. (e) Forfeiture and lapses		1,479 02		
24. (g) Revenue on properties		15,420 03		
Discharge of mortgage fees		1,424 50		
F.—Borrowed Money.				
26. (b) Borrowed by taking deposits		3 85		
27. (c) Borrowed on debentures		200 00		
28. (d) Principal, debenture		18 53		
Bills receivable		403 26		
G.—Received from other sources, viz.:				
30. (a) Profits from withdrawals	2,305 79		150,148 38	
(b) Unclaimed dividends and balances.		374 24	1,355,132 57	
Interest sundry bank deposits	6,198 08			
Premiums on permanent preference stock	116 75		17,938 90	
Totals	\$150,148 38	\$1,355,132 57	\$17,938 90	\$1,832,962 07

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Col. 2.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty		\$530,500 82	
2. (b) Loaned or invested in other securities:			
(i) Share loans		57,422 13	
(ii) Call loans		224,464 00	
6. (c) Real estate		9,149 36	

B.—Expended on Stock Account.

8. Dividends on permanent stock	142,473 11		
9. Dividends on terminating stock	9,019 01		
11. Paid on terminating stock withdrawn	941 40	37,990 19	
12. Paid for terminating stock matured	1,641 92	70,200 00	
4. Paid for terminating stock retired	1,503 80	47,232 43	

C.—Borrowed money (other than foregoing) or interest thereon paid, viz.:

Accrued interest on repayments	353,973 05
Agents' balances	3,149 39
Stocks purchased by Company	26,943 00

D.—Management Expenses (other than foregoing).

Local Government tax, etc.	3,018 38
25. (a) Salaries, wages and fees—directors auditors, and office assistants, etc.	38,328 03
26. (b) Commission on collections	7,044 30
27. (c) Agents' commission on loans	2,865 50
28. (d) Stationery, postage, printing and advertising.	3,338 13
29. (e) Law costs	1,497 41
30. (f) Office rent	1,260 00
31. (g) Travelling expenses	1,589 10
32. (h) Registration fees (Ontario)	200 00
Head office and agency charges	1,380 95
Sundry profit and loss and discount on advance payments	3,564 74
Interest on debentures	713 52

E.—Other Expenditures, etc.

34. (a) Borrowers' guarantee fund and agents' commission	5,076 75		
35. (b) Globe reserve coupons	63 80	1,035 67	
36. (c) Insurance commissions		500 00	
37. (d) Loss on property sold during year 1904		14,444 26	
Interest on monthly payments P. P. stock	5 32		
			225,525 17

F.—Balance.

37. (b) Cash in banks		230,452 60	1,607,456 90
Totals	\$225,527 17	\$1,607,456 90	\$1,832,982 07

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905, None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits $3\frac{1}{2}$ per cent; on debentures, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty 9 per cent.
7. Of the mortgages held by the Corporation \$690,968.80 is on realty situate in Ontario; and \$1,744,866.15 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$90,381.93.
9. Number of aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 45; amount, \$41,042.06.
10. Aggregate market value of the land mortgaged to the Corporation, (valuations) \$4,788,566.03.
11. How often are the securities held by the Corporation valued? As occasion may require.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Secretary, \$5,000; General Manager, \$5,000; Cashier, \$2,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? To December 31st, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: W. H. Cross, F.C.A., Toronto; Jas. Hardy, F.C.A., Toronto. For 1905: W. H. Cross, F.C.A., Toronto; Jas. Hardy, F.C.A., Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January, 1904; dividend rate, 3 per cent.; 2nd July, 1904, dividend rate, 3 per cent.
16. What is the date appointed for the Annual Meeting? 13th June, 1905.
17. Date of last Annual Meeting? 14th June, 1904.

HAMILTON MUTUAL BUILDING SOCIETY.

Head Office, Hamilton, Ontario.

Incorporated under the Building Societies Act (R.S.O., 1887, c. 169) by declaration filed with the Clerk of the Peace for the County of Wentworth, 31st October, 1890.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O., 1897, c. 206.

ANNUAL STATEMENT

Of the condition and affairs of the Hamilton Mutual Building Society, of Hamilton, Ont., at the 30th November, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The Head Office of the Corporation is at No. 100 King Street east, in the City of Hamilton, in the Province of Ontario.

The Board is constituted of ten directors, holding office for one and two years.

The directors and chief executive officers of the Corporation at 30th November, 1904, were as follows, together with their respective terms of office:

Alfred Ward, President, Hamilton,	30th November, 1903;	30th November, 1905
W. J. Morden, Vice-President, Hamilton;	" 1904;	" 1906
Egerton Healy, Director, Hamilton,	" 1903;	" 1905
M. H. Little, Director, Hamilton,	" 1903;	" 1905
Richard Jose, Director, Hamilton,	" 1903;	" 1905
James O. Callaghan, Director, Hamilton,	" 1904;	" 1906
Geo. W. Clarke, Director, Hamilton,	" 1904;	" 1906
Geo. H. Richmond, Director, Hamilton,	" 1904;	" 1906
Geo. W. Spicer, Director, Hamilton;	" 1904;	" 1906
Geo. Ward, Director, Hamilton,	" 1904;	" 1906
J. M. Peregrine, Trustee, Hamilton,	" 1904;	" 1905
A. W. Peene, Trustee, Hamilton,	" 1904;	" 1905
W. J. Aitchison, Trustee, Hamilton,	" 1904;	" 1905
Walter Anderson, Secretary, Hamilton,	" 1904;	" 1905

SCHEDULE B.

Terminating or Withdrawable Stock.

	Instalment.	
	Number.	Amount.
Shares of Terminating or Withdrawable Stock.		\$
Number and amount in force at 30th November, 1903.....	2,602	520,400
Net decrease during 1904.....	4	800
Net total remaining in force at 30th November, 1904.....	2,598	519,600

BALANCE SHEET AS AT 31TH NOVEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

B.—Terminating Capital Stock or Shares.

20. (g) Instalment stock: Total issue now in force, 2,598 shares at \$200 per share, \$519,600, on which has been paid in all \$..... of which sum there has been paid into Loan Fund..	\$56,512 85	
22. (i) Profits or accrued interest on (20) not credited or appropriated	58,432 15	
Total Liabilities		\$114,945 00

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$108,687 39	
---	--------------	--

C.—Debts not above enumerated for which the Corporation holds securities as follows:

22. (j) Debts secured by instalment stock. (Arrears bearing interest.)	2,271 61	
30. (d) Interest due or accrued on bank deposit	99 00	

E.—Cash.

31. (a) On hand	44 43	
32. (b) In bank	3,842 57	
Total assets		\$114,945 00

CASH ACCOUNT.

Receipts for the year ending 30th November, 1904.

I.—Received by the Corporation for its Own Use.

Balance from 30th November, 1903.

(a) Cash (not already shown under (1)) :—

3. (i) On hand	\$ 228 22	
(ii) In bank	2,461 93	

B.—Sums received wholly or partly on Capital Account.

8. (e) Dues on instalments, Building Society Stock	4,679 10	
--	----------	--

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—

10. (i) Principal	16,330 58	
11. (ii) Interest	2,965 94	
(c) Unsecured debts :—		
15. (ii) Interest	80 73	

E.—Miscellaneous.

19. (b) Premium or bonus on loans	18 00	
20. (c) Membership or entrance fees (being income of Corporation)	2 35	
21. (d) Fines	58 65	

G.—Receipts from other sources.

30. (a) Transfer fees	13 50	
(b) Insurance premiums repaid	22 80	
(c) Costs repaid	5 00	
Totals		\$26,886 20

CASH ACCOUNT.—Continued.

Expenditure for the year ending 30th November, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	\$21,849 00
(e) Insurance or taxes advanced on property mortgaged to the Corporation	46 48

D.—Management Expenses (other than foregoing).

25. (a) Salaries and fees	810 00
28. (d) Stationery, postage, printing and advertising	96 72
30. (f) Fuel, rent, taxes (other than in 7) and rates	100 00
32. (h) Registration fees and Ontario tax	95 00
Valuators' fees	2 00

F.—Balance.

37. (a) Cash on hand and in bank	3,887 00
Totals	\$25,886 20

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 30TH NOVEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. 10 per cent. of \$89,207.77.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, none; on debentures, none; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, $5\frac{1}{4}$ per cent.; on other securities, none.
7. Of the mortgages held by the Corporation, \$108,677.39 is realty in Ontario, and none on realty situated elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of the mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to Corporation. \$198,827.00.
11. How often are the securities held by the Corporation valued? Annually.
12. What officers of the Corporation are under bond and for what sums respectively? Secretary-Treasurer, \$1,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? As at 30th November, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: R. E. Kinsman, W. P. Thompson, and F. H. Revell, Hamilton, Ont. For 1905: F. H. Revell, H. Jones and W. Frank Coste, Hamilton.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? No dividend days.
16. What is the date appointed for the Annual Meeting? Second Monday in January.
17. Date of last Annual Meeting? 9th January, 1905.

THE HOME BUILDING AND SAVINGS ASSOCIATION, OF OTTAWA.

Head Office, Ottawa, Ont.

Incorporated under the Building Societies' Act (R.S.O., 1887, c. 169) by declaration filed with the Clerk of the Peace for the County of Carleton, on the 24th June, 1890. (Decl. Book II., 119.) The Company for purposes of distinction, ordinarily uses the words "of Ottawa" as part of its corporate name, but those words do not appear in the declaration of incorporation.

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

On the condition and affairs of the Home Building and Savings Association, of Ottawa, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 46 Sparks Street, in the City of Ottawa, in the Province of Ontario.

The Board is constituted of seven directors, holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

John R. Armstrong, President, Ottawa;	January, 1903; January, 1905.
M. Kavanagh, Vice-President, Ottawa;	January, 1903; January, 1905.
D. O'Connor, Jr., Ottawa;	May, 1903; January, 1905
F. H. Chrysler, K.C., Director, Ottawa;	January, 1904; January, 1906
J. H. Thompson, Director, Ottawa;	January, 1903; January, 1905
E. B. Butterworth, Director, Ottawa;	January, 1904; January, 1906
D. M. Finnie, Director, Ottawa;	January, 1904; January, 1906
C. A. Douglas, Secretary-Treasurer, Ottawa.	

SCHEDULE B.

Terminating or Withdrawable Stock.

	Instalment.	
	No.	Amount.
Shares of Terminating or Withdrawable Stock.		
Number and amount in force at 31st December, 1903.....	1,948	389,600
" " issued during 1904.....	386	77,200
Gross total in force at any time during 1904.....	2,334	466,800
	No.	Amount.
		\$
Deduct as follows:		
Withdrawn and paid off during 1904.....	243	48,600
Retired by Corporation during 1904.....	249	49,800
Total deductions.....	492	98,400
Net total remaining in force 31st December, 1904	1,842	368,400

Summary of Terminating or Withdrawable Stock in force at 31st December, 1904:

1,842 shares of instalment stock (payable by fixed periodical payments) at \$1.00 and \$1.25 per share of \$200 on which shareholders have paid in.. \$36,290 40

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

B.—Terminating Capital Stock or Shares.

20. (g) Instalment stock, less shown in (24): Total issue now in force, 1,842 shares at \$200 per share, \$368,400, on which has been in all \$..... of which sum there has been paid into Loan Fund	\$96,028 40
21. (h) Profits or accrued interest on (20), less shown in (25), and credited or appropriated but not paid out	29,971 56
22. (i) Profits or accrued interest on (20), less shown in (25), and not credited or appropriated	1,600 00
23. (j) Instalments or premiums paid on (20) in advance	262 00

C.—Liabilities to Stockholders or Shareholders other than already shown under A. or B., viz.:

24. Instalments due	2,130 00	\$129,991 96
---------------------------	----------	--------------

Liabilities to the Public.

40. Other liabilities to the public:—

41. (a) Trust Company (including interest due and accrued)	\$15,201 15	15,201 15
--	-------------	-----------

Total liabilities		\$145,193 11
-------------------------	--	--------------

Or.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

5. (b) Freehold land (including buildings)	\$6,243 97
--	------------

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land ..	114,720 00
---	------------

C.—Debts not above enumerated for which the Corporation holds securities as follows:

21. (i) Debts secured only by terminating stock or shares of the Corporation	\$10,295 00
22. (j) Debts secured by terminating stock, being arrears of instalments	4,429 02
	14,724 02

E.—Cash.

32. (b) Cash in bank	9,506 12
----------------------------	----------

Total assets	\$145,193 11
--------------------	--------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

1. (a) Cash in bank	(Col. 1.) \$21,891 07
---------------------------	--------------------------

B.—Sums received wholly or partly on Capital Stock.

8. (e) Dues on instalment building stock	22,757 00
--	-----------

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—

10. (i) Principal	34,152 76
11. (ii) Interest	9,186 19

(b) On other securities. Loans on stock:—

12. (i) Principal	10,375 00
13. (ii) Interest on deposits	96 16

D.—Receipts from Real Estate.

17. (b) Rents	328 66
---------------------	--------

E.—Miscellaneous.

20. (c) Membership or entry fee (being income of Corporation)	105 50
21. (d) Fines	365 70

F.—Borrowed Money.

29. (e) Advances on mortgages	10,060 00
-------------------------------------	-----------

G.—Receipts from other sources, viz.:

30. (a) Transfer fees	4 25
-----------------------------	------

Totals	\$108,262 17
--------------	--------------

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	Col. 2.) \$24,450 00
(b) Loaned or invested in other securities:—	
(i) Stock	6,975 00
(ii) Expended on real estate	205 80

B.—Expended on Stock Account.

11. Paid for terminating stock withdrawn	1,503 00
12. Paid for terminating stock matured	28,699 00
13. Profits paid on (11)	13,312 32

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

Advances on mortgages	20,000 00
-----------------------------	-----------

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	1,579 22
26. (b) Commission or brokerage	2 00
28. (d) Stationery, postage, printing and advertising	43 97
29. (e) Law costs	50 00
32. (h) Registration fee	30 00

E.—Other Expenditures, viz.:

33. (a) Taxes (municipal and government)	69 97
34. (b) Interest on overdrafts	32 65
35. (c) Interest on advances	1,313 22

F.—Balance.

37. (b) Cash in bank	9,506 12
Total	\$108,262 17

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

3. Amount of other existing obligations of the Corporation which will mature in 1905, Estimated at \$20,800. There is \$6,400 of this in the 9th Series which may not mature in December as estimated, but assumption is that it will.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 7 1-5 per cent. On other securities, 7 1-5 per cent.
7. Of the mortgages held by the Corporation, \$114,720 is on realty situate in Ontario.
8. Loans written off or transferred to real estate during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 1. Amount \$2,200.
10. Aggregate market value of the land mortgaged to the Corporation, \$200,000.
11. How often are the securities held by the Corporation valued. At time loan is effected.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$2,000, private sureties.
13. When were the accounts of the Corporation last audited? 11th January, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: Neil McIntosh and T. E. Clendinnin, Ottawa. For 1905: Neil McIntosh and T. E. Clendinnin, Ottawa.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividends were paid on those days respectively? None.
16. What is the date appointed for the Annual Meeting? 3rd Friday in January.
17. Date of last Annual Meeting 20th January, 1905.

THE NIAGARA FALLS BUILDING, SAVINGS AND LOAN ASSOCIATION.

Declaration of Incorporation filed with the Clerk of the Peace for the County of Welland, on the 5th March, 1894. (Dec. Book 1, 29.)

Incorporated under the Building Societies' Act, R.S.O., 1887, c. 169, s. 2 as amended by 56 V. c. 31, s. 1, which (continued by R.S.O. 1897, c. 205, s. 8 (4), has the effect of limiting the operations of the Association to the County of Welland.

The lending and the borrowing powers are governed by the Loan Corporations Act, R. S. O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Niagara Falls Building, Savings and Loan Association, of Niagara Falls, Ontario, to the 31st of December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is on Erie Avenue, in the City of Niagara Falls, in the Province of Ontario.

The Board is constituted of ten directors, holding office for two years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

R. P. Slater, President, Niagara Falls, Ont.;	16th April, 1904; 18th April, 1905
J. C. Rothery, Vice-President, Niagara Falls, Ont.;	19th April, 1904; 16th April, 1905
James Barry, Director, Niagara Falls C.;	16th April, 1903; 16th April, 1905
J. H. McGarry, M.D., Director, Niagara Falls, Ont.;	" "
J. G. Cadham, Director, Niagara Falls, S.;	" "
T. LeBlond, Director, Buffalo, N.Y.;	" "
W. W. Robertson, Director, Niagara Falls Centre, 19th April, 1904;	16th April, 1905
James Bampffield, Director, Niagara Falls Centre,	" "
James Harriman, Director, Niagara Falls Centre,	" "
R. F. Carter, Director, Niagara Falls Centre,	" "
Janet L. Harriman, Secretary, Niagara Falls Centre, 16th Apl., 1904;	6th Apl., 1905

SCHEDULE B.

Terminating or Withdrawable Stock.

	Prepaid.		Instalment.		Total.
	No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.		\$		\$ c.	\$ c.
Number and amount in force at 31st December, 1903.....	233	30,290	1,476	89,248 31	69,533 31
" " issued during 1904.....	180	23,400	363	20,072 84	43,472 84
Gross total in force at any time in 1904.....	413	53,690	1,839	59,316 15	113,006 15
Deduct as follows:					
Withdrawn and paid off during 1904.....	97	12,610	144	18,710 32	31,320 32
Net total remaining in force at 31st December, 1904.....	316	41,080	1,695	40,605 83	81,685 83

Summary of Terminating or Withdrawable Stock in Force at 31st December, 1904.

316 shares prepaid stock at \$130 per share, \$ 41,080 on which 140 shareholders have paid into	
Loan Fund.....	\$41,080 00
1,695 " instalment stock at \$130 " \$220,350 " 182 shareholders have paid in..	\$40,605 83
2,011	\$81,685 83

Total amount distributed or credited in 1904 on terminating or withdrawable stock:

- (2) As dividends out of profits: On prepaid stock, \$1,523.49; on instalment, \$3,000.08.
Rate 5 and 5½ per cent.; 8 per cent.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

B.—Terminating Capital Stock or Shares.

17. (d) Prepaid stock, less shown in (24), total in force 316 shares at \$130 per share, on which has been paid into loan	\$41,080 00
20. (g) Instalment stock, less shown in (24), total issue now in force, 1,695 shares at \$130 per share, \$220,350, on which has been paid into loan fund	40,605 83
21. (h) Profits or accrued interest on (20), less shown in (25) and credited or appropriated but not paid out	6,434 20
22. (i) Profits or accrued interest on (20), less shown in (25) and not credited or appropriated	2,407 72

C.—Liability to Stockholders other than as shown under A. or B., viz.:

26. Land sold for \$450.00, valued at \$365.57	84 43	\$90,612 18
--	-------	-------------

Liabilities to the Public.

37. Owing to banks (including interest due or accrued)	\$1,057 82
39. Due on loans in process of completion or to pay assumed mortgages	2,730 00
	3,787 82
Total Liabilities	\$94,400 00

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$94,250 00
---	-------------

F.—Assets not hereinbefore Mentioned.

37. (a) Office furniture	150 00
Total assets	\$94,400 00

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

	(Col. 1.)	(Col. 2.)	(Col. 4.)
1. (b) Cash (not already shown under (1)) :—			
3. (ii) In bank	\$	717 19	\$ 717 19

B.—Sums received wholly or partly on Capital Stock.

7. (d) Sales of prepaid building society stock	23,400 00
8. (e) Due on instalment building society stock (not including dues from borrowers)	11,929 94
	35,329 94

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—			
10. (i) Principal: Dues from borrowers, \$8,157.90; discharged unmatured loans, \$14,880	\$23,037 90		
11. (ii) Interest	3,991 42		27,029 32

E.—Miscellaneous.

19. (b) Premium or bonus on loans	\$1,095 00
20. (c) Membership or entry fees (being income of Corporation)	120 75
21. (d) Fines	116 90
	1,332 65

F.—Borrowed Money.

25. (a) Bank or other advances, discounts or overdrafts ..	1,057 82	1,057 82
--	----------	----------

G.—Receipts from other sources.

30. (a) Rebate of bank interest	2 20	.....	2 20
Totals	\$2,392 67	\$63,076 45	\$65,469 12

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.			
A.—Sums Loaned or Invested on Capital Account.			
	(Col. 1.)	(Col. 2.)	(Col. 4.)
1. (a) Loaned on mortgages of realty		\$28,470 00	\$28,470 00
B.—Expended on Stock Account.			
9. Dividends paid on terminating stock	\$1,523 49		1,523 49
11. Paid for terminating stock withdrawn		31,320 32	31,320 32
13. Profits paid on (ii)		3,371 92	3,371 92
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:			
18. (a) Bank account: Interest		14 08	14 08
D.—Management Expenses (other than foregoing).			
25. (a) Salaries, wages and fees	\$559 50		
26. (b) Commission or brokerage	18 80		
28. (c) Stationery, postage, printing and advertising	20 01		
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	120 00		
32. (h) Registration fees	30 00		
33. (i) Other management expenditure	1 00		
			749 31
E.—Other Expenditure, viz.:			
34. (a) Auditors' fees	\$20 00		20 00
Totals	\$2,292 80	\$63,176 32	\$65,469 12

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits or debentures. None.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty. 6 per cent.
7. Of the mortgages held by the Corporation, \$94,250.00 on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$125,650.
11. How often are the securities held by the Corporation valued? Whenever deemed necessary; all near at hand.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Treasurer, \$2,000; Solicitor, \$1,000. By private sureties.
13. When were the accounts of the Corporation last audited? 30th September, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed)? For 1904: Miss Edmand and W. J. McMurray, Niagara Falls, Ont. For 1905: Miss Edmand and W. J. McMurray, Niagara Falls, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 31st March, 1904, 4 per cent. on instalment stock; 30th September, 1904, 4 per cent on instalment stock.
16. What is the date appointed for the Annual Meeting? 18th April, 1905.
17. Date of last Annual Meeting? 19th April, 1904.

Rate or rates per cent. of such dividends, 6 per cent.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders and Shareholders).

A.—Permanent Capital Stock or Shares.

1. (b) Ordinary joint stock capital: Total called, \$.....; total paid thereon \$60,485 63

B.—Terminating Capital Stock or Shares.

20. (g) Instalment stock, less shown in (24): Total issue now in force, 4 shares at \$200, 170 shares at \$100, on which has paid in all \$5,662.71, of which sum there has been paid into loan fund 5,662 71
21. (h) Profits or accrued interest on (20), less shown in (25), and credited or appropriated but not paid 890 05

C.—Liabilities to Stockholders or Shareholders other than as already shown under A. or B.

24. Contingent fund 2,403 81
25. Profit and loss account 472 38

\$69,914 58

Liabilities to the Public.

27. Deposits payable on demand, \$22,458.33; on notice, \$4,742.85 \$27,201 18
28. Interest on deposits due or accrued or capitalized 121 85
40. Other liabilities to the public, viz.:—
41. (a) Valuation fees 2 00
42. (b) Bank overdraft 2,995 25

30,320 28

Total liabilities

\$100,234 86

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land \$89,802 29
10. (b) Debts secured by mortgaged land held for sale 444 91
11. (c) Interest due and accrued on items (9) and (10) and not included therein 2,846 71

\$93,093 91

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock of the Corporation.. \$4,508 00
21. (i) Debts secured only by terminating stock or shares of the Corporation 1,470 14
26. (n) Interest due or accrued, on items (20) and (21) 279 46

6,257 60

E.—Cash.

31. (a) On hand 276 35

F.—Assets not hereinbefore Mentioned.

37. (a) Office furniture 608 00

Total assets

\$100,234 86

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

1. (b) Cash: (Col. 1.)
2. (i) On hand \$ 48 93

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on permanent capital stock 4,229 57
8. (e) Dues on instalment building society stock 1,391 75

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—

10. (i) Principal 18,319 74
11. (ii) Interest 5,586 07

(b) On other securities: Stock Loans:—

12. (i) Principal 3,794 73
13. (ii) Interest 506 25

E.—Miscellaneous.

21. (d) Fines 60

F.—Borrowed Money.

25. (a) Bank overdraft 2,995 25
26. (b) Borrowed by taking deposits 35,843 80

G.—Receipts from other sources, viz.:

30. (a) Interest, bank account 32 29
- (b) Sundry receipts 1 93

Totals

\$72,760 90

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

(Col. 1.)

1. (a) Loaned on mortgages of realty	
(b) Loaned on other securities:—	\$21,787 72
2. (i) Bills receivable, secured by stock	4,599 97
7. (d) Insurance and taxes advanced on property mortgaged to the Corporation..	45 41

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	3,560 30
11. Paid for terminating stock withdrawn	562 58
13. Profits paid on dues in advance	12 55

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

18. (a) Bank account (principal and interest)	4,571 72
19. (b) Deposits: Principal, \$35,629.51; interest, \$1,048.46	36,677 97

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	468 50
28. (d) Stationery, postage, printing and advertising	51 50
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	107 33
32. (h) Registration fees	30 00

F.—Balance.

37. (a) Cash on hand	275 35
Totals	\$72,750 90

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$13,071.00.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 4 per cent.; on debentures, none; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, $6\frac{1}{2}$ per cent.; on other securities, 6 per cent.
7. Of the mortgages held by the Corporation all are on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation. \$280,900.
11. How often are the securities held by the Corporation valued? When loan is made and when in arrears.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$1,000; and Treasurer, \$1,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904: J. Tolton and A. F. Armstrong, Owen Sound.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates dividend were paid on those days respectively? 30th June and 31st December. 6 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 28th February, 1905.
17. Date of last Annual Meeting? 22nd February. 1904.

THE PEOPLE'S BUILDING AND LOAN ASSOCIATION OF LONDON, ONT.

Head Office, London, Ont.

Incorporated under The Building Societies Act, R.S.O. 1887, c. 169, by declaration filed with the Clerk of the Peace for the County of Middlesex, on 22nd June, 1892. (Decl. Book I., 75).

The lending and borrowing powers are governed by the Loan Corporations Act, R. S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the People's Building and Loan Association of London, Ont., at 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at 428 Richmond street, in the City of London, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Judge Elliott, President, London, Ont.; 2nd March, 1904; 1st March, 1905.

A. A. Campbell, Vice-President, London, Ont.;

W. H. Moorehouse, M.D., Director, London, Ont.;

I. F. Hellmuth, Director, Toronto, Ont.;

W. F. Roome, M.D., Director, London, Ont.;

Wm. Spittal, Director, London, Ont.;

Malcolm McGugan, Director, Strathroy, Ont.;

A. A. Campbell, Managing Director, London, Ont.

Wm. Spittal, Secretary-Treasurer, London, Ont.

A.—Permanent capital stock: Total amount authorized, \$———; total amount subscribed, \$258,400.00 as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of Shares.	Per Value of Shares.	—		
Fully called.....	2,584	\$ 100	258,400	190,800.61	*\$7,599.39

SCHEDULE B.

Terminating or Withdrawable Stock.

			Instalment.		Total.
			No.	Amount.	
Shares of Terminating or Withdrawable Stock.					
Number and amount in force at 31st December, 1903			8,729	\$ 872,900	\$ 872,900
" " issued in 1904.....			697	69,700	69,700
Gross total in force at any time in 1904.....			9,426	942,600	942,600
			No.	Amount.	
Deduct as follows:				\$	
Withdrawn and paid off during 1904.....			1,918	191,800	
Total deduction.....			1,918	191,800	191,800
Net total remaining in force at 31st December, 1904.....			7,508	750,800	750,800

Summary of Terminating or Withdrawable Stock in force at 31st December, 1904.
 7,508 shares instalment stock at \$100 per share, \$750,800, on which shareholders have paid into Loan Fund \$234,788 30
 Total amount distributed or credited in 1904:
 (2) As dividends out of profits 16,695 31
 Rate or rates per cent. of such dividends, 8, 6 and 5 per cent.

*Payable by instalments.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called	\$198,800 61	
5. (e) Unappropriated profits in respect of (1)	12 92	
6. (f) Reserve fund in respect of (1)	17,000 00	
		\$207,813 53

B.—Terminating Capital Stock or Shares.

20. (g) Instalment stock, less shown in (24), total issue now in force, 7,508 shares at \$100 per share, \$750,800, which has been paid in all \$..... of which sum there has been paid into Loan Fund	\$234,788 30	
21. (h) Profits or accrued interest on (20), less shown in (25) and credited or appropriated but not yet paid....	16,695 31	251,483 61
		\$459,297 14

Liabilities to the Public.

27. Deposits payable on notice	\$45,434 28	
29. Debentures issued in Canada	53,097 78	
30. Interest due and accrued on (29)	9,500 00	
37. Owing to banks		
40. Other liabilities to the public, viz.:—		
41. (a) Suspense account (insurance moneys)	12,194 30	
		120,226 36
Total liabilities		\$579,523 50

Or. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:—		
2. (i) London, held in freehold	\$25,195 23	
7. (d) Head office building, accrued rents	328 98	
		\$25,524 21

B.—Debts secured by Mortgages on Land.

9. (a) Debts (other than item 10) secured by mortgages of land..	\$500,653 29	
10. (b) Debts secured by mortgaged land held for sale	2,768 26	
		503,421 55

C.—Debts not above enumerated for which the Corporation holds securities as follows:

21. (i) Debts secured only by terminating stock or shares of the Corporation	\$19,030 94	
22. (j) Debts secured by Trust Company stock	250 00	
23. (k) Dues in course of collection	7,497 89	
24. (l) Expense fund in course of collection	1,483 14	
Agents' balance	38 50	
		28,300 47

E.—Cash.

31. (a) On hand	\$21,186 90	21,186 90
32. (b) In banks		

F.—Assets not hereinbefore Mentioned.

33. (b) Office furniture	\$882 37	
39. (c) Auxilliary safes (small banks)	208 00	
		1,090 37
Total assets		\$579,523 50

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

	(Col. 1.)	(Col. 2.)	(Col. 3.)	(Total Col. 4.)
(b) Cash (not already shown under (1)) :—				
1. (i) On hand				\$37,781 78
3. (ii) In bank				

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on joint stock permanent capital..			\$18,958 20	
6. (b) Premiums on (4)			358 99	19,317 19
8. (c) Dues on instalment building society stock		\$44,253 29		44,253 29

C.—Receipts on account of Investments, Loans or Debts.

10. (a) On mortgages of realty :—				
(i) Principal				155,506 31
(ii) Interest				36,686 20
11. (b) On other securities :—				
12. (i) Principal (instalment stock loans) ..				7,998 73

D.—Receipts from Real Estate owned Beneficially by Corporation.

16. (a) Sales (not incl. in any of foregoing items)				14,245 88
17. (b) Rents				1,579 25

E.—Miscellaneous.

19. (b) Premiums (including discharge fees)	\$1,129 51			
20. (c) Expense fund	11,726 82			
21. (d) Fines	1,387 99			
22. (e) Forfeiture or lapses	509 25			14,753 57

F.—Borrowed Money.

26. (b) Borrowed by taking deposits				38,931 21
27. (c) Borrowed on debentures				16,397 78

G.—Receipts from other sources, viz.:

30. (a) Transfers	\$ 5 00			
(b) Accrued expense fund	1,384 73			
(c) Agents' balances	1,200 00			
(d) Accrued rents	19 66			2,609 39
Total				\$390,059 58

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Col. 2.)	Total (Col. 4.)
1. (a) Loaned on mortgages of realty			\$148,420 19
2. (b) Loaned or invested in other securities, viz. :—			
(i) On instalment stock		\$4,236 96	4,236 96
(ii) Suspense account (insurance moneys)			856 54
(iii) Real estate surplus			54 29
(iv) Real estate			11,563 36
6. Head office premises improvements			3,724 35
7. (d) Written off real estate			267 50

B.—Expended on Stock Account.

8. Dividends paid on permanent stock		\$10,898 90	
9. Dividends paid on terminating stock			
10. Interest paid on terminating stock		2,904 31	
11. Paid for terminating stock matured and withdrawn ..		97,901 38	
12. Expense fund permanent stock		4,995 52	
17. Agents' Balances		1,238 50	117,938 61

C.—Borrowed Money.

18. (a) Bank account (principal and interest)			45,000 00
19. (b) Deposits: Interest on savings deposits			577 25
20. (c) Debentures issued in Canada: Principal, \$17,984.91; interest, \$3,096.69			21,081 60

CASH ACCOUNT.—Continued.

Expenditure for year ending 31st December, 1904—Continued.

D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	\$4,377 00	
26. (b) Commission or brokerage	5,369 50	
27. (c) Office expenses	35 87	
28. (d) Stationery, postage, printing and advertising	875 02	
29. (e) Law costs	519 75	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	298 88	
31. (g) Travelling expenses	147 95	
32. (h) Registration fees	314 65	
Bank commission	102 85	
		12,041 47
E.—Other Expenditures, viz.:		
34. (a) Discount on advance payments, \$71.92; tax on income, \$464.58	\$536 50	
35. (b) Insurance, \$223.00; office furniture, \$238.94; auditors, \$300.00	761 94	
36. (c) Accrued expense fund, \$1,483.14; accrued rent, \$328.98	1,812 12	
		3,110 56
F.—Balance.		
37. (a) Cash on hand and in banks		21,186 90
Totals		\$390,059 58

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures, issued by the Corporation in Canada, which will mature in 1905. \$8,100.00.
3. Amount of other existing obligations of the Corporation which will mature in 1905, \$9,500.00.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation, 1905, \$56,903.00.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, $3\frac{1}{4}$ per cent.; on debentures, $4\frac{1}{2}$ per cent.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 7.89 per cent.; on other securities, 9 per cent.
7. Of the mortgages held by the Corporation, \$500,653.29 is on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904, \$11,563.36.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904: No. 2; amount, \$9,000.
10. Aggregate market value of the land mortgaged to the Corporation, \$952,435.00.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Managing Director, \$3,000, and Secretary-Treasurer, \$3,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited 14th February, 1905.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904: John Overell and Major Hayes, London. For 1905: To be elected at annual meeting, March 1st, 1905.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 30th June, 1904, \$5,317.59. 31st December, 1904, \$5,581.31.
16. What is the date appointed for the Annual Meeting? 1st March, 1905.
17. Date of last Annual Meeting? 2nd March, 1904.

THE PETERBOROUGH WORKINGMEN'S BUILDING AND SAVINGS SOCIETY.

Head Office, Peterborough, Ontario.

Incorporated under the Buildings Societies Act (R.S.O., 1887, c. 169) by declaration filed with the Clerk of the Peace for the County of Peterborough, on the 17th January, 1889 (Decl. Book I., 47.)

The lending and borrowing powers are governed by the Loan Corporations Act, R. S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Peterborough Workingmen's Building and Savings Society, of Peterborough, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 363 Water Street, in the Town of Peterborough, in the Province of Ontario.

The Board is constituted of twelve directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

T. B. McGrath, President, Peterborough, Ont.; 14th Jan'y, 1904; 13th Jan'y, 1905.		
James Lynch, Vice-President, Peterborough, Ont;	"	"
Geo. Ball, Director, Peterborough, Ont;	"	"
John Clancy, Director, Peterborough, Ont.;	"	"
M. Coughlin, Director, Peterborough, Ont.;	"	"
Dr. McNulty, Director, Peterborough, Ont.;	"	"
F. McFadden, Director, Peterborough, Ont.;	"	"
H. LeBrun, Director, Peterborough, Ont.;	"	"
A. Murty, Director, Peterborough, Ont.;	"	"
J. McGrath, Director, Peterborough, Ont.;	"	"
E. A. Peck, Director, Peterborough, Ont.;	"	"
L. Minicola, Director, Peterborough, Ont.;	"	"
J. McCabe, Director, Peterborough, Ont.;	"	"
R. Sheehy, Director, Peterborough, Ont.;	"	"
James Murty, Treasurer, Peterborough, Ont.;	"	"
John Corkery, Secretary, Peterborough, Ont.;	"	"

SCHEDULE B.

Terminating or Withdrawable Stock.

Shares of Terminating or Withdrawable Stock.			No.	Amount.
Number and amount in force at 31st December, 1903			341	\$ 13,719.70
Number and amount issued during 1904.....			59	4,039.00
Gross total in force at any time in 1904.....			400	17,758.70
Deduct as follows:				
	No. of Shares.	Amount.		
Withdrawn and paid off during 1904.....	27	\$ 667.00		
Retired by Corporation.....	11	1,551.00		
Total deductions	38	2,218.00	38	2,218.00
Net total remaining in force 31st December, 1904			362	\$15,540.70

Summary of Terminating or Withdrawable Stock in Force 31st December, 1904.

362 shares of instalment stock at \$200 per share, \$.....; on which share-	
holders have paid into Loan Fund	\$15,540.70
Total amount distributed or credited in 1904:—	
(2) As dividends out of profits	657.62
Rate per cent. of such dividends, 6.64 per cent.	

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

B.—Terminating Capital Stock.

20. (g) Instalment stock, less shown in (24); Total issue now in force, 362 shares at \$200 per share \$..... on which has been paid in all \$....., of which sum there has been paid into Loan Fund	\$15,540 70	
21. (h) Profits or accrued interest on (20) less shown in (25) and credited or appropriated but not paid	3,160 80	\$18,701 50

Liabilities to the Public.—None.

Total liabilities		\$18,701 50
-------------------------	--	-------------

Cr. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$14,603 99	
11. (c) Interest due or accrued on item (9) not included therein	910 34	\$15,514 33
12. (d) Of the debts mentioned in item (9) the sum of \$1,000 is due by directors and officers of the Corporation. (Not extended.)		

C.—Debts not above enumerated for which the Corporation holds securities as follows:

21. (l) Debts secured only by terminating stock or shares of the Corporation	\$3,063 00	
26.(m) Interest due or accrued on item (21) and not included therein	14 92	3,067 92

E.—Cash.

31. (a) On hand	\$ 2 30	
32. (b) In bank	116 95	119 25
Total assets		\$18,701 50

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

	(Col. 1.)	(Col. 4.)
(a) Cash (not already shown under (1)) :—		
2. (i) On hand	\$ 2 30	
3. (ii) In bank	3,682 64	\$3,684 94

B.—Sums received wholly or partly on Capital Stock.

8. (e) Dues on instalment building society stock	\$4,039 00	4,039 00
--	------------	----------

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—		
10. (i) Principal	800 00	
11. (ii) Interest	646 25	
(b) On other securities, society's stock :—		
12. (i) Principal	265 00	
13. (ii) Interest or dividends	69 37	
(c) Unsecured debts :—		
15. (ii) Interest, bank balances	72 75	1,853 37
E.—Miscellaneous.		
20. (c) Membership or entry fees (being income of Corporation)	\$14 75	
21. (d) Fines	11 82	26 57
Totals		\$9,603 88

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	\$4,100 00	
2. (b) Loaned on stock of society	2,285 00	
		\$6,385 00

B.—Expended on Stock Account.

11. Paid for terminating stock withdrawn	\$ 667 00	
12. Paid for terminating stock matured	1,551 00	
13. Profits paid on (11) and (12)	704 88	
		2,922 88

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$ 130 00	
28. (d) Stationery, postage, printing and advertising	4 75	
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	12 00	
32. (h) Registration fees, etc.	30 00	
		176 75

F.—Balance.

37. (a) Cash on hand and in bank	119 25	
Total		\$9,603 88

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures, issued by the Corporation in Canada, which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905, \$2,000.
4. Amount of securities held by the Corporation which will mature and become payable in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, none; on debentures, none.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 6 per cent.; on other securities, 6 per cent.
7. Of the mortgages held by the Corporation, \$14,603.99 is on realty situate in Ontario; and none elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation during 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$26,650.00.
11. How often are the securities valued? When mortgage is taken.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Secretary, \$1,000; Treasurer, \$1,000. Private sureties.
13. When were the accounts of the Corporation last audited? 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: F. E. Bell and John Dingnan, Peterborough; for 1905, F. E. Bell and John Dingnan, Peterborough.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? None.
16. What is the date appointed for the Annual Meeting? Wednesday after the second Monday in January.
17. Date of last Annual Meeting? 13th January, 1904.

THE STRATFORD BUILDING AND SAVINGS SOCIETY.

Head Office, Stratford, Ontario.

Incorporated under the Building Societies Act (R.S.O. 1887, c. 169) by declaration filed with the Clerk of the Peace for the County of Perth on the 23rd August, 1889, (Decl. Book I., 19).

The lending and the borrowing powers are governed by the Loan Corporations Act, R. S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The Stratford Building and Savings Society, of Stratford, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is on corner of Market and Albert Streets, in the City of Stratford, in the Province of Ontario.

The Board is constituted of twelve directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Wm. Davidson, President, Stratford;	5th November, 1904;	3rd November, 1905.
Clement McIlhargey, 1st Vice-President, Stratford;	"	"
Hon. Nelson Monteith, M.P.P., 2nd Vice-Pres, Stratford	"	"
John Brown, Director, Stratford;	"	"
Joseph Baxter, Director, Stratford;	"	"
J. P. Mabey, K.C., Director, Stratford;	"	"
Dr. Robert Whiteman, Director, Shakespeare;	"	"
Thomas Trow, Director, Stratford;	"	"
Duncan Stewart, Director, Hampstead;	"	"
J. P. Brown, Director, Goderich;	"	"
A. F. McLaren, M.P., Director, Stratford;	"	"
C. F. Neild, Director, Stratford;	"	"
D. B. Burritt, Secretary, Stratford;	"	"

A.—Permanent capital stock: Total amount authorized, \$500,000.00; total amount subscribed, \$264,700, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of Shares.	Par Value of Shares.	—		
		\$	\$	\$ c.	\$ c.
1. Fully paid.....	414	100	41,400	41,400.00	.....
2. Partly paid.....	2,238	100	223,300	87,745.27	135,554.73
Totals	2,647		264,700	129,145.27	135,554.73

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

Total liabilities	\$219,603 43
--------------------------	---------------------

BALANCE SHEET.—Continued.

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item (10)) secured by mortgages of land ..	\$206,357 09	
11. (c) Interest due or accrued on item (9) and not included therein.	4,494 10	
		\$210,851 19

C.—Debts not above enumerated for which the Corporation holds securities as follows:

21. (i) Debts secured only by terminating stock or shares of the Corporation	1,130 00	
26. (n) Interest due and accrued on item 21 and not included therein.	132 82	
		1,262 82

E.—Cash.

31. (a) On hand	311 61	
32. (b) In bank	1 67	313 28

F.—Assets not hereinbefore mentioned.

37. (a) Office furniture	73 50	
38. (b) Insurance on mortgaged property	11 00	
39. (c) Cost of management since last closing of books, 30th September, 1904	478 44	
41. (c) Reorganization account	6,568 14	
42. (f) Bank and other interest paid since books last closed	45 06	
		7,176 14
Total assets		\$219,603 43

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

	(Col. 1.)	(Col. 2.)	(Col. 3.)	(Col. 4.)
(b) Cash not already shown under (1):				
2. (i) On hand				\$189 34
3. (ii) In bank				1,256 06

B.—Sums received Wholly or Partly on Capital Stock.

4. (aa) Joint stock capital received in advance of calls			3,102 87	3,102 87
2. (e) Dues on instalment building society stock		7,072 59		7,072 59

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:				
10. (i) Principal				39,616 18
11. (ii) Interest	5,973 01			5,973 01
(b) On other securities:				
12. (i) Principal				1,443 00
13. (ii) Interest or dividends	59 56			59 56
(c) Unsecured debts:				
14. (i) Insurance advanced				4 00

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales				2,620 00
17. (b) Rent	139 45			139 45

E.—Miscellaneous.

19. (b) Premium or bonus on loans	85 05			
20. (c) Membership or entry fees (being income of Corporation)	8 75			
21. (d) Fines	1 91			95 71
Discounts on withdrawals	124 52			124 52

CASH ACCOUNT.—Continued.

Receipts for the year ending 31st December, 1904.—Continued.

F.—Borrowed Money.			
25. (a) Bank or other advances, discounts or overdrafts			10,700 12
26. (b) Borrowed by taking deposits			79,192 81
Outstanding cheques			220 00
Rents from mortgaged property			358 00
G.—Receipts from other sources, viz.:			
30. (a) Office rents	50 00		50 00
Sundries (accrued interest)			4,702 20
Loan expenses collected			104 80
Bank and other interest			73 99
Collaterals received			110 00
Total			<u>\$157,209 21</u>

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.			
A.—Sums Loaned or Invested on Capital Account.			
	(Col. 1.)	(Col. 2.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty			\$59,899 72
(b) Loaned or invested in other securities:			
2. (i) Loans on terminating stock			720 00
7. (e) Insurance or taxes advanced on property mortgaged to the Corporation			115 49
B.—Expended on Stock Account.			
8. Dividends paid on permanent stock	6,321 91		6,321 91
9. Dividends paid on terminating stock	943 12		943 12
10. Interest paid on terminating stock	250 89		250 89
11. Paid for terminating stock withdrawn		10,499 78	
12. Paid for terminating stock matured		3,594 50	
13. Profits paid on (11) and (12)		2,611 68	
Permanent stock returned to minors		93 00	93 00
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:			
18. (a) Bank account: Principal and interest			6,540 55
19. (b) Deposits: Principal, \$62,768.52; interest all capitalized			62,768 52
Outstanding cheques previous year			101 97
D.—Management Expenses (other than foregoing).			
25. (a) Salaries, wages and fees	1,197 09		
26. (b) Commission or brokerage	185 30		
28. (d) Stationery, postage, printing and advertising	79 85		
30. (f) Fuel, rent, taxes (other than item 7 and 32) and rates	379 96		
32. (h) Registration fees and Government taxes	114 55		
Other expenditure	67 55		
			<u>2,024 30</u>
E.—Other Expenditures, viz.:			
34. (a) Loan expenses			125 10
35. (b) Office furniture			6 00
36. (c) Reorganisation account			168 80
37. (d) Rebate on interest			9 50
F.—Balances.			
37. (b) Cash on hand and in bank			313 28
Total			<u>\$157,209 21</u>

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures, issued by the Corporation in Canada, which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations which will mature in 1905. \$4,320.12.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$3,535.00.
5. Average rate of interest per annum received by the Corporation during 1904. On deposits, $3\frac{1}{4}$ per cent.; on debentures, none; on debenture stock, none.
5. Average rate of interest per annum paid by the Corporation during 1904. On mortgages of realty, $6\frac{1}{4}$ per cent.; on other securities, 8 per cent.
7. Of the mortgages held by the Corporation \$204,857.09 is on realty situate in Ontario, and \$1,500 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, estimated at about \$398,829.
11. How often are the securities held by the Corporation valued? When loan is made.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$7,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? In January, 1905 up to and including 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904: J. R. Stuart and James McIntyre. For 1905: J. R. Stuart and James McIntyre.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 10th April, 1904 and 15th October, 1904. 5 per cent. on Permanent Stock and Terminating not in advance, and 4 per cent. on terminating stock in advance and matured terminating stock.
16. What is the date appointed for the Annual Meeting? First Friday in November each year.
17. Date of last Annual Meeting? 5th November, 1904.

THE YORK COUNTY LOAN AND SAVINGS COMPANY.

Head Office, Toronto, Ontario.

Incorporated under the Building Societies Act, R.S.O., 1887, c. 169, by declaration filed with the Clerk of the Peace for the County of York on the 21st December, 1891. (Decl. Book II., p. 83.)

The lending and borrowing powers are governed by the Loan Corporations Act, R. S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The York County Loan and Savings Company of Toronto, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is 243 Roucesvalles Avenue, in the City of Toronto, in the Province of Ontario.

The Board is constituted of five directors holding office for one year.

The directors and chief executive officers of the Corporation as at 31st December, 1904, were as follows, together with their respective terms of office:

Joseph Phillips, President, Toronto,	17th March, 1904;	23rd March, 1905.
A. T. Hunter, Vice-President, Toronto;	"	"
E. J. Burt, Director, Toronto;	"	"
R. H. Sanderson, Director, Toronto;	"	"
V. Robin, Secretary-Treas., Toronto	"	"

A.—Permanent capital stock: total amount authorized, \$1,500,000; total amount subscribed, \$113,040.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsist- ing at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	Number of Shares.	Par Value of Shares.	—		
Partly paid.....	5,652	\$ 20	113,040	\$ *14,699.29	\$ 98,340.71

SCHEDULE B.

Terminating or Withdrawable Stock.

		Fully Paid.	Instalment.	Total.	
		Amount.			
Shares of Terminating or Withdrawable Stock.		\$	c.	\$	c.
Amount in force at 31st December, 1908.....		31,380.00		1,685,876.48	1,717,256.48
" " issued during 1904.....		187,390.00		1,335,394.18	1,472,794.18
Gross total in force at any time in 1904.....		168,770.00		3,021,210.66	3,189,980.66
		Amount.			
		\$	c.		
Deduct as follows:					
Withdrawn and paid off during 1904		1,414,755.56	148,110.00	1,266,645.56	
Transferred to Contingent Account during 1904.....		14,750.76		14,750.76	
Total deduction			148,110.00	1,281,396.32	1,429,506.32
Net total remaining in force at 31st December, 1904.....			20,660.00	1,789,814.34	1,760,474.34

* First call upon Permanent Stock was in process of collection at 31st December, 1904.

Summary of Terminating or Withdrawable Stock in force at 31st December, 1904.		
1,033 shares fully paid stock at \$20 per share, \$20,660, on which 1,033 shareholders have paid in		20,660 00
72,492 shares instalment stock at \$100 per share on which shareholders have paid in		1,739,814 34
		<u>\$1,760,474 34</u>
Total amount distributed or credited in 1904:		
(1) As interest		71,110 86
Rate of such interest, per cent. per annum, 4 per cent.		
(2) As dividends out of profits		33,186 77
Rate or rates per cent. of such dividends, 5 per cent.		

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.	Capital and Liabilities.	
Capital (Liabilities to Stockholders or Shareholders).		
A.—Permanent Capital Stock or Shares.		
2. (b) Ordinary joint stock capital, 50 per cent. called: Total called, \$56,520; total paid thereon	\$8,179 29	
(cc) Joint stock capital paid in advance of calls	6,520 00	\$14,699 29
B.—Terminating capital stock or shares.		
14. (a) Fully paid stock, less shown in (24): Total in force, 1,033 shares at \$20 per share, carried to loan fund	20,660 00	
20. (g) Instalment stock, less shown in (24): Total issue now in force, 72,492 shares at \$100 per share, on which has been paid in all \$....., of which sum there has been paid into loan fund	1,725,115 05	
21. (h) Profits or accrued interest on (20), less shown in (25), and credited or appropriated but not yet paid	42,504 34	
C.—Liabilities to Stockholders or Shareholders other than as already shown under A or B, viz.:		
24. Reserve fund	70,000 00	
25. Borrowers' sinking fund	83,755 17	
26. Contingent account	263,796 28	
		<u>2,205,830 24</u>
Liabilities to the Public.		
39. Due on loans in process of completion or to pay assumed mortgages	8,330 00	
40. Other liabilities to the public, viz.:		
41. (a) Mortgages assumed for members	9,100 00	
		<u>17,430 00</u>
Total Liabilities		<u>\$2,227,960 13</u>
Or.	Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable property owned beneficially by Corporation.		
1. (a) Office premises situate as follows:		
2. (i) At Toronto, held in freehold	\$40,000 00	
5. (b) Freehold lands (including buildings)	870,909 78	
		<u>\$910,909 78</u>
B.—Debts secured by mortgages of land.		
9. (a) Debts (other than item 10) secured by mortgages of land	1,001,125 81	
11. (c) Interest due or accrued on item (9) and not included therein.	10,802 11	
		<u>1,011,927 92</u>

ASSETS.—Continued.

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Debts secured by municipal bonds or debentures	42,500 00	
21. (i) Debts secured only by terminating stock or shares of the Corporation	129,418 95	
22. (j) Advances to borrowers, taxes, insurance, etc.	4,381 84	
23. (k) Loans on shares of other companies	50,000 00	
26. (n) Interest due or accrued on 14, 21, 22 and 23 and not included therein	2,503 63	
		222,804 42

E.—Cash.

31. (a) On hand	1,703 36	
32. (b) In banks	75,415 93	
		77,119 29

F.—Assets not hereinbefore mentioned.

37. (a) Accounts receivable	394 21	
38. (b) Furniture and fixtures	8,904 61	
		9,198 72
Total assets		\$2,237,960 13

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

	(Col. 1.)	(Col. 2.) (Total Col. 4.)
(b) Cash (not already shown under (1)):		
2. (i) On hand		\$5,470 68
3. (ii) In bank		201,735 25

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on joint stock permanent capital	14,699 29	
(aa) Joint stock capital received in advance of calls		
6. (c) Sales of fully paid stock	137,390 00	
8. (e) Dues on instalment stock	1,335,334 18	

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:		
10. (i) Principal		107,941 23
11. (ii) Interest on mortgages and share loans	93,462 84	
(b) On other securities:		
12. (i) Principal share loans		64,392 00

D.—Receipts from real estate owned beneficially by Corporation.

16. (a) Sales (not included in any of the foregoing items)		6,529 54
17. (b) Rents	15,699 92	

E.—Miscellaneous.

18. (a) Commission, brokerage (or remuneration as corporate agent, trustee, etc.)	137,115 91	
22. (e) Forfeiture or lapses after deducting revival	14,750 76	

G.—Receipts from other sources, viz.:

30. (a) Accounts receivable		13,859 20
(b) Municipal debentures and stocks		161,347 25
Totals	\$261,029 43	\$2,048,698 62 \$2,309,728 06

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.	(Col. 1.)	(Col. 2.) (Total Col. 4.)
1. (a) Loaned on mortgages of realty		\$335,832 96
(b) Loaned or invested in other securities, viz.:		
(i) On Company's stock		102,739 50
3. (ii) Mortgages assumed for members		1,000 00
4. (iii) Municipal debentures and stocks	56 25	
5. (iv) Loans on shares of other companies		50,000 00
6. (c) Real estate purchased and improvements made thereon		71,316 09
7. (e) Insurance and taxes advanced on property mortgaged to the Corporation		1,083 60

B.—Expended on Stock Account.

9. Dividends paid on terminating stock	33,186 77	
10. Interest paid on terminating stock	71,110 83	
11. Paid for terminating stock withdrawn		1,414,755 56
15. Terminating stock forfeited or lapsed after deducting revivals		14,750 76
D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	41,990 41	
26. (b) Commission or brokerage, advances to agents and travelling expenses	52,668 43	
28. (d) Stationery, postage, printing and advertising, etc.	14,010 10	
29. (e) Law costs	1,213 56	
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	9,502 18	
32. (h) Registration fees	3,113 20	

E.—Other Expenditure.

33. (a) Furniture and fixtures	1,061 25	
34. (b) Accounts receivable		13,217 32
F.—Balances.		
37. (b) Cash on hand and in banks		77,119 29

Totals	\$227,912 98	\$2,081,815 07	\$2,309,728 05
--------------	--------------	----------------	----------------

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

- Amount of other existing obligations of the Corporation which will mature in 1905. None.
- Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
- Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 6 per cent.; on other securities, 8 per cent.
- Of the mortgages held by the Corporation, \$963,725.81 is on realty situate in Ontario, and \$37,400 on realty situate elsewhere.
- Loans written off or transferred to real estate account during 1904, \$1,000.00.
- Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 1. Amount, \$1,000.00.
- Aggregate market value of the land mortgaged to the Corporation, \$2,002,251.62.
- How often are securities held by the Corporation valued? Quarterly.
- (a) What officers of the Corporation are under bond and for what sums respectively? Treasurer, \$11,000; Assistant-Treasurer, \$9,000. By Guarantee Company.
- When were the accounts of the Corporation last audited? 28th February, 1905.
- Names and addresses of the auditors respectively for 1904 and 1905 (if appointed) For 1904: Thos. G. Hand and G. A. Harper, Toronto.
- What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively?
- What is the date appointed for the Annual Meeting? 23rd March, 1905.
- Date of last Annual Meeting? 24th March, 1904.

ACME LOAN AND SAVINGS COMPANY.*

Head Office, Toronto, Ont.

Incorporated as the Sons of England Building, Loan and Savings Association under the Building Societies Act, (R.S.O., 1887, c. 169), by declaration filed in the Office of the Clerk of the Peace for the County of York on the 24th June, 1889. (Decl. Book II., 67).

The lending and the borrowing powers are governed by the Loan Corporations Act, R. S. O., 1897, c. 205.

The corporate name was changed to Acme Loan and Savings Company by Order in Council Ontario, 28th July, 1899.

ANNUAL STATEMENT

Of the condition and affairs of the Acme Loan and Savings Company of Toronto, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 12 Richmond St., East in the City of Toronto, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective term of office:

W. W. Hodgson, President, Toronto, Ont.; 3rd February, 1904; 1st February, 1905
 James Poffley, Vice-President, Toronto; " "
 James Edwards, Director, Bracondale; " "
 Edmund L. Taylor, Director, Winnipeg, Man.; " "
 M. A. Mackenzie, Director, Toronto, Ont.; " "
 M. B. Morrison, M.P.P., Director, Trenton; " "
 George H. Dyer, Director, Toronto; 2nd September, 1904; 1st February, 1905
 W. J. Hodgson, Secretary, Toronto.

A.—Permanent capital stock; total amount subscribed, \$25,600, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subslating at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of Shares.	Par Value of Shares.	—		
1. Fully called.....	46	\$ 100	\$ 4,600	\$ 4,600.00	.....
2. Partly called.....	95	100	9,500	4,300.00	5,200.00
3. Instalment (payable by fixed periodical payments and still in process of payment).....	115	100	11,500	2,732.75	8,767.25
Totals.....	256	.....	25,600	11,632.75	13,967.25

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

*Formerly Sons of England Building, Loan and Savings Association.

SCHEDULE B.

II

Terminating or Withdrawable Stock.

	Fully paid.		Prepaid.		Instalment.		Total.
	No.	Amount.	No.	Amount.	No.	Amount.	
Sales of Terminating or Withdrawable Stocks.		\$		\$		\$	\$
Number and amount in force at 31st December, 1903.	717	71,700	1583	158,300	7101	710,100	985,100
Number and amount issued during 1904.	502	50,200			288	23,800	74,000
Totals	1219	121,900	1583	158,300	7389	733,900	1,009,100
Deduct as follows:							
	No. of shares.	Am't					
		\$					
Withdrawn and paid off during 1904	1174	117,400	118	11,800	158	15,300	117,400
Net total remaining in force at 31st December, 1904.			1101	110,100	1380	138,000	891,700

Summary of Terminating or Withdrawable Stock in force at 31st December, 1904.				Carried to loan fund.
1101 Shares fully paid.				
Stock at \$100 per share.	\$100 on which	173 shareholders have paid in		\$108,100.00
1380 Shares prepaid.				
Stock at \$100 per share.	100 on which	183 shareholders have paid in		56,478.24
6436 Shares instalment.	100 on which	1572 shareholders have paid in		31,288.16
8917 Shares at \$100		1928		\$195,861.40
Total amount distributed or credited in 1904.				
(1) As interest				\$ 12,384.22
Rate, 6 per cent.				

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Permanent capital, fully called: Total called, \$4,600; total paid thereon	\$4,600 00	
2. (b) Permanent capital, per cent. called: Total called, \$4,300; total paid thereon	4,300 00	
8. (h) Instalment permanent stock (payable at fixed periodical payments): Total subscribed, \$11,500, on which has been paid	2,732 75	
9. (i) Dividends declared on (8) but not yet paid	172 90	\$11,805 65

B.—Terminating Capital Stock or Shares.

14. (a) Fully paid stock, less shown in (24): Total in force, 1,101 shares at \$100 per share, carried to Loan Fund	\$108,100 00	
15. (b) Profits or accrued interest on (14), less shown in (25) and credited or appropriated, but not yet paid	247 04	
17. (d) Prepaid stock, less shown in (24): Total in force, 1,380 shares at \$100 per share, on which has been paid into Loan Fund	56,478 24	
18. (e) Profits or accrued interest on (17), less shown in (25) and credited or appropriated, but not yet paid	123 52	
20. (g) Instalment stock, less shown in (24): Total issue now in force, 6,436 shares at \$100 per share, \$643,600, on which there has been paid in all \$....., of which sum there has been paid into Loan Fund	31,283 16	196,231 96

C.—Liabilities to Stockholders or Shareholders other than above.

24. Contingent Fund	\$3,000 00	
25. Balance at credit profit and loss account, \$2,291.57 less \$282.70 (not extended)	2,008 87	5,008 87
		\$213,046 48

Liabilities to the Public.

40. Other liabilities to public, viz.:		
41. (a) Sundry creditors		1,018 15
Total		\$214,064 63

BALANCE SHEET.—Continued.

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the Corporation.

5. (b) Freehold land (including buildings)	\$2,503 89	\$2,503 89
--	------------	------------

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	171,583 25	
11. (c) Interest due and accrued on item (9) and not included therein	1,007 50	
		172,590 75

C.—Debts not above enumerated for which the Corporation holds securities as follows:

21. (l) Debts secured only by terminating stock or shares of the Corporation	\$8,036 60	8,036 60
--	------------	----------

E.—Cash.

31. (a) On hand	8,136 67	
32. (b) In bank	10,295 14	
		18,431 81

F.—Assets not hereinbefore Mentioned.

37. (a) Office furniture and stationery	\$1,315 00	
38. (b) Expense	10,340 24	
Manitoba License (not extended, \$282.70.)		
40. (d) Sundry debtors	846 34	
		12,501 58

Total		\$214,064 63
-------------	--	--------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

	(Col. 1.)	(Col. 2.)	(Col. 3.)	(Col. 4.)
(b) Cash (not already shown under (1)) :—				
2. (i) On hand	\$3,205 80			
3. (ii) In bank	9,386 07			
				\$12,591 87

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on permanent Capital		\$2,387 25	2,387 25
6. (c) Sales of fully paid building society stock	\$43,900 00		
7. (d) Sales of prepaid building society stock	2,112 85		
8. (e) Dues on instalment building society stock	9,334 70		
			55,347 55

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—			
10. (i) Principal	\$31,600 72		
11. (ii) Interest	\$15,825 04		
(b) On Stock Loans :—			
12. (i) Principal	1,677 25		
13. (ii) Interest and dividends	88 10		
			33,277 97
			15,913 14

D.—Receipts from Real Estate.

16. (a) Sales	\$1,023 91		
17. (b) Rents	44 21		
			1,068 12

E.—Miscellaneous.

18. (a) Commission, brokerage, etc.	\$128 51		
19. (b) Premiums or bonus on loans	335 23		
21. (d) Fines	17 15		
			480 89

G.—Receipts from other sources, viz.:

30. (a) Transfer and reduction fees	\$ 23 50		
(b) Insurance premiums, valuation fees, etc.	1,974 45		
(c) Bills receivable	597 76		
			2,595 71

Totals	\$32,649 73	\$88,625 52	\$2,387 25	\$123,662 50
--------------	-------------	-------------	------------	--------------

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Col. 2.)	(Col. 4.)
1. (a) Loaned on mortgages of realty	\$44,184 95		\$44,184 95
(b) Loaned or invested in other securities:—			
2. (i) Loaned on shares		\$2,514 05	2,514 05
7. (d) Incumbrances on realty paid off	377 23		
(e) Insurance and taxes advanced on property mortgaged to the Corporation	39 96		
			417 19

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$ 443 00		
9. Dividends paid on terminating stock	2,137 92		
10. Interest paid on terminating stock	10,196 30		\$12,777 22
11. Paid for terminating stock withdrawn		32,510 31	32,510 31

D.—Management Expenses (other than foregoing).

25. (a) Salaries and fees	\$3,938 00		
26. (b) Commission or brokerage	2,154 67		
27. (c) Advanced to agents	1,582 10		
28. (d) Stationery, postage, printing and advertising	469 07		
29. (e) Law costs	6 00		
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	302 04		
31. (g) Travelling expenses	1,253 02		
32. (h) Registration fees	138 55		
33. (i) Other management expenditure	1,413 91		
			11,259 36

E.—Other Expenditures.

34. (a) Office furniture	\$ 40 00		
35. (b) Insurance premiums, valuation fees, etc.	1,527 61		
			1,567 61

F.—Balance.

(a) On hand and in bank	\$18,431 81		18,431 81
Totals	\$88,638 14	\$35,024 36	\$123,662 50

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 9 and 10½ per cent.; on other securities, 10 per cent.
7. Of the mortgages held by the Corporation, \$103,041.44 is on realty situate in Ontario; and \$68,541.81 on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$293,370.00.
11. How often are the securities held by the Corporation valued? When considered necessary.
12. What officers of the Corporation are under bond, and for what sum respectively? Manager, \$10,000; Cashier, \$1,000; Inspector, \$10,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? 14th January, 1905.
14. Names and addresses of the auditors for 1904 and 1905. For 1904: W. C. Eddis, F.C.A., and W. B. Close and J. A. Tweedale, Toronto. For 1905: W. C. Eddis, F.C.A., and J. A. Tweedale.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January and 2nd July, 1904. Rate 6 per cent.
16. What is the date appointed for the Annual Meeting? First Wednesday in February.
17. Date of last Annual Meeting? 1st February, 1905.

CANADIAN HOMESTEAD LOAN AND SAVINGS ASSOCIATION.

Head Office, Toronto, Ontario.

Incorporated by declaration under the Building Societies Act, R.S.O., 1877, c. 164; the declaration was filed with the Clerk of the Peace for the County of York, 24th September, 1886 (Decl. Book II., 63).

For the lending and borrowing powers see Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the conditions and affairs of the Canadian Homestead Loan and Savings Association, of Toronto, Ontario, at 31st December, 1904, and for the year ending on that day; made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 66 Victoria Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of five directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

*John Hillock, President, Toronto, Ontario;	10th March, 1904;	7th March, 1905
John Firstbrook Vice-President, Toronto, Ont.;	"	"
Richard T. Coady, Toronto, Ont.;	"	"
Rev. Edward T. Fox, Director, Toronto, Ont.;	"	"
†J. W. Curry, Director, Toronto, Ont.;	...	"
A. J. Pattison, Managing Director, Toronto, Ont.	"	"

A.—Permanent capital stock: total amount authorized, \$500,000; total amount subscribed, \$156,800, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of Shares.	Par Value of Shares.			
1. Fully called	966	\$ 100	\$ 96,600	\$ 90,470.73	\$ 6,129.27
2. Partly called	602	100	60,200	7,867.08	52,332.97
Totals	1,568	.....	156,800	98,337.76	58,462.24

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

SCHEDULE B.

Terminating or Withdrawable Stock.

	Fully Paid.		Prepaid.		Instalment.		Total.
	No.	Amount.	No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.		\$		\$		\$	\$
Number and amount in force 31st December, 1903	145	14,500	80	8,000	2521	252,100	274,600
Number and amount issued during year ending 31st December, 1904.....							
Gross total in force at any time during year ending 31st December, 1904.....	145	14,500	80	8,000	2521	252,100	274,600
Total deductions during year	22	2,200	11	1,100	807	80,700	84,000
Net total remaining in force 31st December, 1904	123	12,300	69	6,900	1714	171,400	190,600
Summary of terminating or withdrawable stock in force at 31 December, 1904:							
123 shares fully paid up stock at \$100 per share on which	22 shareholders have paid into loan fund....	\$	12,147.50				
69 " prepaid " 100 "	" 18 "	"	4,834.52				
1714 " instalment " 100 "	343 "	"	41,370.06				
1906			\$ 58,352.08				

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.	Capital and Liabilities.
------------	---------------------------------

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary permanent capital fully called: Total called, \$96,600;	
total paid thereon	\$90,470 73
2. (b) Ordinary permanent capital, per cent. called; total called,	
\$	7,867 03
5. (e) Unappropriated profits in respect of (1) and (2)	122 05
6. (f) Reserve fund in respect of (1) and (2)	1,100 00
Profit and loss	64 30
	<u>\$99,624 11</u>

B.—Terminating Stock or Shares.

14. (a)	Fully paid stock, less shown in (24): Total in force 123 shares at \$100 per share, carried to Loan Fund	\$12,147 50
17. (d)	Prepaid stock, less shown in (24): Total in force, 69 shares at \$100 per share, on which has been paid into Loan Fund	4,834 52
20. (g)	Instalment stock, less shown in (24): Total issue now in force, 1,714 shares at 50 cents and \$100 per month per share of \$100, on which has been paid in all \$....., of which sums there has been paid into Loan Fund	41,370 06
21. (h)	Profits or accrued interest on 20, less shown in (25) and credited or appropriated but not yet paid	2,972 64

Liabilities to the Public.

27. Deposits payable on notice	\$20,150 75	20,150 75
Total liabilities		\$181,099 58

Cr.	Assets.
-----	---------

I.—Assets of which the Corporation is the Beneficial Owner.

7. (d) Grand Valley Railway Bonds	\$18,000 00
--	-------	--------------------

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$95,508 88	
10. (b) Debts secured by mortgaged land held for sale under sale agreements	233 52	
(bb) Debts secured by land held by the Company as mortgagee in possession, or secured by land for the rents and profits of which the Company is accountable	3,977 21	
		<u>\$99,719 61</u>
Carried forward		\$117,719 61

BALANCE SHEET.—Continued.

Brought forward				\$117,719 61
C.—Debts not above enumerated for which the Corporation holds securities as follows:				
22. (j) Loans, stock collateral			\$4,051 94	
23. (h) Loans at call, stock collateral			46,299 46	
				50,351 40
E.—Cash.				
32. (b) In bank				9,753 64
F.—Assets not hereinbefore Mentioned.				
37. (a) Office furniture			\$336 15	
38. (b) Stock commissions			200 00	
39. (c) Loan commissions			200 00	
40. (d) Due by auditors			30 00	
41. (e) Due by officers			250 00	
42. (f) Home Life open account			2,308 78	
				3,274 93
Total assets				\$181,099 58

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

	(Col. 1.)	(Col. 2.)	(Col. 3.)	Total (Col. 4.)
1. (a) Cash (not already shown under (1)) :—				
3. (ii) In bank				\$7,313 83

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on joint stock permanent capital ..			\$4,609 03	4,609 03
6. (c) Sales fully paid building society stock ..		\$ 50 00		
8. (e) Due on instalment society building stock ..		13,000 70		13,050 70

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—				
10. (i) Principal				33,067 56
11. (ii) Interest and premiums	\$7,650 58			7,650 58
(b) On other securities :—				
12. (i) Principal				36,955 29
15. Discharge of mortgages	29 50			29 50

D.—Receipts from Real Estate owned Beneficially by Corporation.

16. (d) Sales (not incl. in any of foregoing items)				3,468 99
17. (d) Rents				120 00

E.—Miscellaneous.

20. (c) Membership or entry fees	225 50			225 50
21. (d) Fines and fees	19 35			19 35

F.—Borrowed Money.

26. (b) Borrowed by taking deposits				20,165 00
---	--	--	--	-----------

G.—Receipts from other sources, viz.:

30. (a) Interest from bank	59 10			
(b) Sundry items	23 69			82 79
Totals	\$8,007 72	\$13,050 70	\$4,609 03	\$126,758 12

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st. December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Col. 2.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty			\$19,488 69
2. (b) Loaned or invested on other securities, viz.:—			
3. (i) Bonds	\$67,982 24		
4. (ii) Call loans	555 00		
5. (c) Real Estate purchase or improved			68,537 24
			123 81

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$6,042 17		6,042 17
10. Interest paid on terminating stock	1,434 18		1,434 18
11. Paid on terminating stock withdrawn		\$17,899 86	17,899 86
Expense credit refunded	172 50		172 50

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits: Principal			142 61
-----------------------------------	--	--	--------

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	1,430 00		
26. (b) Commission or brokerage	324 25		
28. (d) Stationery, postage, printing and advertising	302 76		
30. (c) Fuel, rent, taxes (other than in 7 and 32) rates and expenses	1,106 41		
			3,163 42

F.—Balance.

37. (a) Cash in bank			9,753 64
Totals	\$79,349 51	\$17,899 86	\$126,758 12

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, about 6 per cent.; on other securities, about 5 per cent.
7. Of the mortgages held by the Corporation, \$168,993.50 is on realty situate in Ontario, and \$15,790.00 on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$184,783.50.
11. How often are the securities held by the Corporation valued? Upon maturity of mortgage if not repaid.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Secretary-Treasurer, \$5,000. By private sureties.
13. When were the accounts of the Corporation last audited? Audited monthly.
14. Names and addresses of the auditors respectively for 1904 and 1905. For 1904: Chas. Arnoldi and J. H. Sara, Toronto. For 1905: Not yet appointed.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 1st January and 1st July.
16. What is the date appointed for the Annual Meeting? 2nd Tuesday in March.
17. Date of last Annual Meeting? 8th March, 1904.

THE CANADIAN SAVINGS LOAN AND BUILDING ASSOCIATION.

Head Office, Toronto, Ont.

Incorporated under the Building Societies Act, R.S.O., 1887, c. 169, by declaration filed with the Clerk of the Peace for the County of York on the 11th February, 1890. (Dec. Book II., 71.)

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The Canadian Savings, Loan and Building Association, of Toronto, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 43 Victoria street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of five directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

W. J. Hambly, President and Manager, Toronto; 23rd Feb. 1904; 28th Feb., 1905
 T. H. Cooper, 1st Vice-President, Toronto; "
 P. E. Hambly, 2nd Vice-President, Toronto; 23rd Feb., 1904
 Wm. Williamson, Director, Toronto; 6th Sept., 1904
 A. E. Nash, Secretary.

A.—Permanent capital stock; total amount authorized, \$1,000,000; total amount subscribed, \$252,350.00, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and permanent capital stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of Shares.	Par Value.	—		
1. Fully called.....	2,516	\$ 100	\$ 251,600	\$ 222,608.49	
2. Partly called.....	7½	100	750	261.10	
Total.....	2,523½		252,350	222,869.59	

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

SCHEDULE B.
Terminating or Withdrawable Stock.

	Fully paid.		Prepaid.		Instalment.		Total.
	No.	Amount.	No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.		\$		\$		\$	\$
Number and amount in force at 31st December, 1903.....			6,511	651,100	12,481	1,248,100	1,899,200
Number and amount issued during 1904	483	48,300	79	7,900	3,339	333,900	390,100
Gross total in force at any time in 1904.....	483	48,300	6,590	659,000	15,820	1,582,000	2,289,300
Deduct as follows:	No. of shares.	Am't					
Withdrawn and paid off during 1904.....	2,834	283,400	467	46,700	2,367	236,700	283,400
Converted into Permanent Stock during 1904.....	1,277	127,700	1,213	121,300	64	6,400	127,700
Instalment Stock converted into fully paid up during 1904.....	463	46,300			463	46,300	46,300
Forfeited and lapsed during 1904.....	2,473	247,300			2,473	247,300	247,300
Total deduction	7,047	704,700	1,680	168,000	5,367	536,700	704,700
Net total remaining in force at 31st Dec., 1904.....	483	48,300	4,910	491,000	10,453	1,045,300	1,584,600

Summary of Terminating or Withdrawable Stock in force 31st December, 1904.			
483 shares fully paid up stock at \$100 per share \$	48,300, on which	257 shareholders have paid into	
Loan Fund.....			\$ 46,225.89
4,910 shares prepaid stock at \$100 per share.....	491,000, on which	691 shareholders have paid into	
Loan Fund.....			182,476.89
10,453 shares instalment stock at \$100 per share....	1,045,300, on which	5,082 shareholders have paid into	
Loan Fund.....			129,071.09
15,846	\$1,584,600	5,980	\$357,773.37
Total amount distributed or credited in 1904 on terminating or withdrawable stock ;			
(2) As divided out of profits.....			\$ 48,122.40
Rate 5, 6 and 7 per cent.			

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.	Capital and Liabilities.		
	Capital (Liabilities to Stockholders and Shareholders).		
	A.—Permanent Capital Stock or Shares.		
1. (a)	Ordinary permanent capital, fully called \$252,350; total paid thereon	\$222,608 49	
8. (b)	Instalment permanent stock (payable by fixed periodical payments); total subscribed, \$750, on which has been paid....	261 10	\$222,869 59
	B.—Terminating Stock or Shares.		
14. (a)	Fully paid stock, less shown in (24): Total in force 483 shares at \$100 per share, carried to Loan Fund	\$46,225 39	
15. (b)	Profits or accrued interest on (14), less shown in (25) and credited or appropriated but not yet paid	700 00	
17. (d)	Prepaid stock, less shown in (24): Total in force, 4,910 shares \$100 per share, on which has been paid into Loan Fund..	180,026 89	
18. (e)	Profits or accrued interest on (17), less shown in (25), credited or appropriated, but not yet paid	10,212 58	
20. (g)	Instalment stock, less shown in (24): Total issue in force, 10,453 shares at \$100 per share, \$1,045,300, on which has been paid in all \$154,415.30, of which sum there has been paid into Loan Fund	122,612 04	
21. (h)	Profits or accrued interest on (20), less shown in (25) and credited or appropriated, but not yet paid..	6,144 01	
24.	Principal sum due by Corporation (30 days' notice given Dec., paid, prepaid, or instalment, other than shown in (14), (17) and (20) as to which the Corporation has received notice of withdrawal, but at 31st Dec., 1904, had not paid off, viz:		
24.	Principal sum due by Corporation (30 days' notice given Dec., 1904, and paid in January, 1905)	8,909 05	
26.	Interest, profits or dividends due by Corporation	412 48	375,242 44
	Liabilities to Stockholders or Shareholders other than above.		
	Suspense account	\$ 389 28	
26.	Contingent account, \$3,902.28 less \$827.50 (not extended)	3,074 78	
	Reserve	3,000 00	6,464 06
	Liabilities to the Public (including interest due or accrued).		
41. (a)	Due on loans in process of completion	\$51,555 38	
42. (b)	Repayment on real estate loans (sinking fund)	77,527 08	129,082 46
	Total Liabilities		\$733,658 55

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.			
A.—Immovable Property Owned Beneficially by Corporation.			
5. (b) Freehold land, including buildings			\$28,840 21
B.—Debts secured by Mortgages of Land.			
9. (a) Debts (other than item 10) secured by mortgages of land....	\$639,338 42		
11. (c) Interest on (9) due and accrued	19,685 68		
			659,024 10
C.—Debts not above enumerated for which the Corporation holds securities as follows:			
20. (h) Debts secured only by permanent stock or shares of the Corporation		\$8,912 00	
21. (i) Debts secured only by terminating stock or shares of the Corporation		10,380 77	
26. (n) Interest due and accrued on items (20) and (21).....		1,955 94	
			21,248 71
D.—Unsecured Debts.			
27. (a) Agents' balances	\$ 490 94		
28. (b) Manitoba, Quebec and Ontario Charters and license account, (not extended) \$927.50.			
29. (c) Conversion account		10,173 94	
Furniture		1,764 23	
			12,429 11
E.—Cash.			
31. (a) On hand	\$6,578 81		
32. (b) In bank	5,537 61		
			12,116 42
Total assets			\$733,658 55
Note.—Assets reported in 1903, but written off in 1904 (not extended) \$832.74. Off furniture, charters and conversion account.			

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.				
	(Col. 1.)	(Col. 2.)	(Col. 3.)	(Col. 4.)
1. (b) Cash (not already shown under (i)) :—				
2. (i) On hand		\$430 58		
3. (ii) In bank		370 41		
				\$800 99
B.—Sums received wholly or partly on Capital Stock.				
4. (a) Calls on permanent capital			\$68,166 03	68,166 03
6. (c) Sales of fully paid building society stock..		\$46,925 39		
7. (d) Sales of prepaid stock		3,553 60		
8. (e) Dues on instalment building society stock		105,294 27		155,773 26
C.—Receipts on account of Investments, Loans or Debts.				
(a) On mortgages of realty :—				
10. (i) Principal		148,699 36		148,699 36
11. (ii) Interest, incl. interest on share loans \$48,105 48				48,105 48
(b) On other securities :—				
Repayment share loans		12,104 32		12,104 32
D.—Receipts from Real Estate Owned Beneficially by the Corporation.				
16. (a) Sales (not included in any of the foregoing items) and instalments		260 00		260 00
17. (b) Rents	2,162 00			2,162 00
E.—Miscellaneous.				
19. (b) Premiums or bonus on loans	24,109 32			24,109 32
22. (e) Forfeiture or lapses	5,140 33			5,140 33
23. (f) Revivals of terminating stock		2,189 30		2,189 30
G.—Receipts from other sources, viz.:				
(a) Suspense account		2,475 00		2,475 00
(b) Repayment advances to agents		53 40		53 40
(c) Repayment of insurances, taxes & charges		6,922 82		6,922 82
Totals	\$79,517 13	\$329,278 45	\$68,166 03	\$476,961 61

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Col. 2.)	(Col. 4.)
(a) Loaned on mortgages of realty		\$136,038 76	\$136,038 76
(b) Loaned or invested in other securities:—			
2. (i) On Association's shares		15,880 79	15,880 79
3. (ii) Permanent improvements to properties		285 41	285 41
5. (iv) Repairs to property	812 34		812 34
(e) Insurance or taxes advanced on property mortgaged to the Corporation		8,732 73	8,732 73

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	37,517 25		37,517 25
9. Dividends paid on terminating stock			
11. Paid for terminating stock withdrawn	4,091 63	141,453 30	145,544 93
15. Terminating stock forfeited or lapsed		5,140 33	5,140 33
16. Terminating stock converted into permanent		61,555 17	61,555 17
17. Terminating stock revived	2,189 30		2,189 30
Instalment stock converted into fully paid		16,149 71	16,149 71

C.—Borrowed Money (other than foregoing) or interest thereon paid.

18. (a) Bank account (principal and interest)		3,258 69	3,258 69
---	--	----------	----------

D.—Management Expenses (other than foregoing).

25. (a) Salaries and wages, \$7,109.37; directors' and auditors' fees, \$1,662.50	8,771 87		
26. (b) Commission or brokerage	11,557 76		
28. (d) Stationery, printing and advertising	1,053 39		
29. (e) Law costs	4 40		
30. (f) Rent, head office and branches	1,351 50		
31. (g) Travelling expenses	267 35		
32. (h) Registration fees and Provincial taxes	719 45		
Postage, discount and exchange	370 79		
General expenses	12 81		
			24,109 32

E.—Other Expenditures, viz.:

34. Suspense account		2,359 79	2,359 79
35. Conversion account		5,270 67	5,270 67

F.—Balance.

37. (a) Cash on hand and in banks		12,116 42	12,116 42
Totals	\$68,719 84	\$408,244 77	\$476,961 61

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 10 4-5 per cent.; on other securities, 12 per cent.
7. Of the mortgages held by the Corporation \$457,323.75 is on realty situate in Ontario, and \$201,700.35 elsewhere.
8. Loans written off or transferred to real estate account in 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904: No. 4, amount \$2,150.00.
10. Aggregate market value of the land mortgaged to the Corporation, \$1,107,400.00.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? President and Manager, \$2,000; Cashier, \$500; Secretary, \$2,000; Treasurer, \$2,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? 16th February, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905. For 1904: S. G. Leveratt and H. G. Luke, Toronto, Ont. For 1905: S. G. Leveratt and H. G. Luke, Toronto, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? No special dates. Payments of dividends semi-annually. 5, 6 and 7 per cent.
16. What is the date appointed for the Annual Meeting? Fourth Tuesday in February in each year.
17. Date of last Annual Meeting? 28th February, 1905.

DOMINION PERMANENT LOAN COMPANY.

Head Office, Toronto, Ont.

CONSTATING INSTRUMENTS.

1890.—Declaration under R.S.O. 1887, c. 169; filed with the Clerk of the Peace for the County of York, 7th May, 1890. The original corporate name was The Dominion Building and Loan Association.

1897.—Act of the Dominion of Canada, 60-61 V. c. 85, extending the business of the Company to the whole Dominion; defining the borrowing powers of the Company; regulating its issue of debentures and debenture stock; providing for the prohibition of loans upon the Company's own stock; continuing the Company under the control of the Loan Corporation Act of Ontario.

1898.—Order in Council of Ontario, (29th January, 1898) changing the corporate name to the Dominion Permanent Loan Company, to take effect from and after 1st August, 1898.

1898.—Act of Dominion of Canada, confirming the said change of corporate name. See Statutes of Canada, 1899.

ANNUAL STATEMENT

Of the condition and affairs of the Dominion Permanent Loan Company, of Toronto, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 12 King Street west, in the City of Toronto, in the Province of Ontario.

The Board is constituted of five directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Hon. J. R. Stratton, President, Peterborough;	2nd March, 1904;	1st March, 1905
Thomas P. Coffee, Vice-President, Toronto;	"	"
C. Kloepper, Director, Guelph;	"	"
D. W. Karn, Director, Woodstock;	"	"
F. M. Holland, Managing Director and Secretary, Toronto;	"	"

A.—Permanent capital stock: Total amount authorized, \$10,000,000; total amount subscribed, \$1,376,300, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	Number of shares.	Par value of shares.	—		
		\$	\$	\$ c.	\$ c.
1. Fully called.....	7,586	100	758,600	758,600 00	.....
2. Partly called.....	6,177	100	617,700	300,185 68	317,514 32
Totals.....	13,763	—	1,376,300	1,058,785 68	317,514 32

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

SCHEDULE B. (Terminating or Withdrawable Stock.)

	Fully paid		Prepaid.		Instalment.		Total.
	No.	Amount.	No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.							
		\$		\$		\$	
Number and amount in force at 31st December, 1903.....	3½	350	1891	189,100	1,408½	140,850	330,300
Number and amount issued during 1904.....							
Gross total in force at any time in 1904	3½	350	1891	189,100	1,408½	140,850	330,300
Deduct as follows :	No. of shares.	Amount.					
Withdrawn and paid off during 1904.....	675½	\$ 67,550					
Converted into permanent stock during 1904.....	30	3,000	30	3,000	645½	64,550	67,550
			20	2,000	10	1,000	3,000
Total deduction	705½	70,550	50	5,000	655½	65,550	70,550
Net total remaining in force at 31st December, 1904	3½	350	1841	184,100	753	75,300	259,750

Summary of Terminating or Withdrawable Stock in Force at 31st December, 1904.

3½ shares fully paid stock at \$100 per share, \$350.00 on which has been credited to loan fund	\$ 350 00
1,841 shares prepaid stock (other than above) at \$100 per share, \$184,100.00 on which has been credited to loan fund	92,050 00
753 shares instalment stock (payable by fixed payments) at \$100 per share, \$75,300 on which has been paid in	41,420 97
	\$133,820 97

Total amount distributed or credited in 1904:—

(1) As interest, \$7,672.12.

Rate of such interest, per cent. per annum, 7.6 and 12.9 per cent.

(2) As to dividends out of profits, \$21.00 and \$5,656.50.

Rate or rates per cent. of such dividends, 6 per cent.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders and Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$758,600; total paid thereon	\$758,600 00
2. (b) Ordinary joint stock capital; total called \$300,185.68; total paid thereon	300,185 68
4. (d) Dividends declared in respect of (1), (2) and (8), but not yet paid	31,724 66
5. (e) Unappropriated profits in respect of (1), (2) and (8)	13,546 25
6. (f) Reserve fund in respect of (1), (2) and (8)	160,000 00
7. (g) Contingent fund in respect of (1), (2) and (8)	5,964 68
	\$1,270,021 27

B.—Terminating Capital Stock or Shares.

14. (a) Fully paid stock, less shown in (24); total in force, 3½ shares at \$100 per share, on which has been paid into loan fund	350 00
15. (b) Profits or accrued interest on (14), less shown in (25) and credited or appropriated but not yet paid	10 50
17. (d) Prepaid stock, less shown in (24); total in force, 1,841 shares at \$100 per share, on which has been paid into loan fund	92,050 00
18. (e) Profits or accrued interest on (17), less shown in (25) and credited or appropriated but not yet paid	12,011 24
20. (g) Instalment stock, less shown in (24); total issue now in force, 753 shares at \$100 per share, \$..... on which has been paid in all \$....., of which sum there has been paid into loan fund	41,420 97
21. (h) Profits or accrued interest on (20), less shown in (25) and credited or appropriated but not yet paid	25,762 25
	171,604 96
C.—	
24. Unclaimed dividends	50 07
	\$1,441,676 30

BALANCE SHEET AS AT 31ST DECEMBER, 1904.—Continued.

Liabilities to the Public.		
27. Deposits payable on notice	\$207,004 63	
28. Interest on deposits due, or accrued or capitalized	5,812 07	
29. Debentures in Canada	1,581,728 50	
30. Interest due and accrued on (29)	21,292 33	
		1,815,837 53
Total liabilities		\$3,257,513 83
<hr/>		
Cr.	Assets.	
<hr/>		
I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property Owned Beneficially by Corporation.		
5. (b) Freehold land (including buildings) other than foregoing.. ..		\$24,528 82
B.—Debts secured by Mortgages of Land.		
9. (a) Debts (other than item 10) secured by mortgages of land..	\$2,761,816 23	
11. (c) Interest due or accrued on item (9) and not included therein	148,106 66	
		2,909,922 88
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
20. (h) Debts secured only by permanent stock or shares of the Corporation		8,091 65
21. (i) Debts secured only by terminating stock or shares of the Corporation		
E.—Cash.		
31. (a) On hand	\$17,458 26	
32. (b) In bank	42,050 37	
		59,508 63
F.—Assets not hereinbefore Mentioned.		
37. (a) Debentures and accrued interest	\$234,512 52	
38. (b) Office furniture, premises and fixtures	12,293 00	
39. (c) Owed by agents	2,250 66	
40. (d) Bank stock	6,405 67	
		255,461 85
Total assets		\$3,257,513 83

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.				
A.—Balances from 31st December, 1903.				
	(Col. 1.)	(Col. 2.)	(Col. 3.)	(Col. 4.)
(b) Cash (not already shown under (1)) :—				
2. (i) On hand				\$5,120 19
3. (ii) In bank				58,019 71
B.—Sums received wholly or partly on Capital Stock.				
4. (a) Calls on joint stock permanent capital ..			\$9,628 17	
8. (c) Dues on instalment building stock	\$879 59	\$5,428 74		
				15,936 50
C.—Receipts on account of Investments, Loans or Debts.				
(a) On mortgages of realty :—				
10. (i) Principal	\$618,325 48			
11. (ii) Interest				
(b) On other securities :—				
13. (ii) Interest or dividends	14,873 39			
				633,198 87
D.—Receipts from Real Estate owned Beneficially by Corporation.				
16. (a) Sales	\$ 644 50			
17. (b) Rents	1,078 00			
				1,722 50
E.—Miscellaneous.				
21. (d) Fines	\$ 84 19			
F.—Borrowed Money.				
26. (b) Borrowed by taking deposits	794,157 88			
27. (c) Borrowed on debentures	374,980 00			
				1,169,137 88
G.—Receipts from other sources, viz.:				
30. (a) Unclaimed dividends	\$ 35 07			
(b) Sundries	668 06			
(c) Stock loans	75 00			
				778 13
Totals				\$1,883,997 97

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.			
A.—Sums Loaned or Invested on Capital Account.			
	(Col. 1.)	(Col. 2.)	(Col. 4.)
1. (a) Loaned on mortgages of realty	\$350,724 19		
(b) Loaned or invested in other securities:			
2. (i) Real estate, repairs, etc.	459 03		
			\$351,183 22
B.—Expended on Stock Account.			
8. Dividends paid on permanent stock	\$63,033 22		
9. Dividends paid on terminating stock	5,677 50		
10. Interest paid on terminating stock	19,646 03		
11. Paid for terminating stock withdrawn		\$8,043 03	
12. Paid for terminating stock matured		28,050 00	
16. Terminating stock converted into permanent		2,096 17	
			126,545 95
C.—Borrowed Money (other than foregoing) or interest thereon paid:			
19. (b) Deposits: Principal, \$734,269.80; interest, \$5,812.07..	\$740,081 87		
20. (c) Debentures issued in Canada: Principal, \$477,543.35; interest, \$81,833.81	559,377 16		
			1,299,459 03
D.—Management Expenses (other than foregoing).			
25. (a) Salaries, wages and fees	\$24,812 76		
26. (b) Commission or brokerage	10,034 36		
28. (d) Stationery, postage, printing and advertising	3,956 95		
29. (e) Law costs	1,002 42		
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates and sundry expenses	2,381 50		
31. (g) Travelling expenses	1,820 75		
32. (h) Registration fees and sundry expenses	2,837 38		
Office furniture	455 02		
			47,301 14
F.—Balance.			
37. (a) Cash on hand and in bank			59,508 63
Totals			\$1,883,997 97

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$271,464.21.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, instalments on mortgages.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3½ per cent.; on debentures, 4½ per cent.; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 8½ per cent.
7. Of the mortgages held by the Corporation \$199,208.05 is on realty situate in Ontario, and \$2,710,714.83 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$3,268.51.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 12; amount \$15,683.45.
10. Aggregate market value of the land mortgaged to the Corporation, about \$5,000,000.00.
11. How often are securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$5,000; Accountant, \$1,000; Cashier, \$2,000; Sub-Manager, \$5,000; Provincial Manager, \$5,000. By Guarantee Company.
13. When were the accounts of the Corporation last audited? 31st December, 1904.
14. Names and addresses of the auditors for 1904: H. Vigeon, F.C.A., and O. M. Hudson, F.C.A., Toronto. For 1905: Not appointed.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January, 1904, 6 per cent. per annum. 2nd July, 1904, 6 per cent. per annum.
16. What is the date appointed for the Annual Meeting? 1st March, 1905.
17. Date of last Annual Meeting? 2nd March, 1904.

THE RELIANCE LOAN AND SAVINGS COMPANY OF ONTARIO.

Head Office, Toronto, Ont.

Incorporated under the Buildings Societies' Act, R.S.O., 1887, c. 169, by declaration filed with the Clerk of the Peace for the County of York, on the 2nd March, 1893. (Decl. Book II., 95.) The original corporate name was "The Excelsior Loan and Savings Union," which name was by Order-in-Council in Ontario, 24th June, 1895, changed to "The Reliance Loan and Savings Company of Ontario." (Ibid.)

The lending and the borrowing powers are governed by the Loan Corporations Act, R.S.O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Reliance Loan and Savings Company, of Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 84 King Street East, in the City of Toronto, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Hon. John Dryden, President, Toronto;	7th March, 1904;	6th March, 1905
James Gunn, Vice-President, Toronto;	"	"
David Kemp, Director, Toronto;	"	"
Rev. G. I. Taylor, Director, Toronto;	"	"
R. T. Shiell, M.B., Director, Toronto;	"	"
H. Waddington, Director, Toronto;	"	"
George Gillies, Director, Toronto;	"	"
John Blacklock, Manager, Toronto.		
W. N. Dollar, Secretary, Toronto.		

A.—Permanent capital stock: Total amount authorized, \$2,500,000; total amount subscribed, \$617,050, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	Total amount issued and subsisting at 31st December, 1904.			Total amount of actual payments thereon.	Total amount unpaid and constituting an asset of the Corporation.
	No. of shares.	Par value of shares.	—		
		\$	\$ c.	\$ c.	\$ c.
1. Fully called	61,705	10	617,050 00	617,050 00	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

SCHEDULE B.

Terminating or Withdrawable Stock.

		Prepaid.		Instalment.		Total.
		No.	Amount.	No.	Amount.	
Shares of Terminating or Withdrawable Stock.						
Number and amount in force at 31st December, 1903.....		3,802	\$ 380,200	13,200	\$ 1,320,000 c.	\$ 1,700,200
Number and amount issued during 1904.....						
Gross total in force at any time during 1904.....		3,802	380,200	13,200	1,320,000	1,700,200
		No. of shares.	Amount.			
Deduct as follows:			\$ c.			
Withdrawn and paid off during 1904 }		2,442	61,561 79			
Converted into permanent shares.... }			16,809 81			
Total deduction.....		2,442	78,371 60	500	50,000	244,200
Net total remaining in force 31st December, 1904.....		3,302	330,200	11,258	1,125,800	1,456,000

Summary of Terminating or Withdrawable Stock in force 31st December, 1904.

3,302 shares prepaid stock at \$100 per share,	\$330,200	on which	202 shareholders have paid in	\$106,675 24
11,258 shares instalment stock at \$100	1,125,800	"	"	327,728 23
14,560	\$1,456,000	1,757		\$434,403 47
Total amount distributed or credited in 1904 :—				
(2) As dividends out of profits—				\$29,756 60
Rate or rates per cent. of such dividends: Prepaid, 5 per cent.; Instalment, 9 per cent.				

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital called; total called, \$617,050;	
total paid thereon	\$617,050 00
4. (d) Dividends declared in respect of (1), but not yet paid	23,894 62
6. (f) Reserve fund in respect of (1)	21,066 71
7. Contingent fund (not extended) \$1,833.29	
	\$662,011 33

B.—Terminating Capital Stock or Shares.

17. (d) Prepaid stock, less shown in (24); total in force, 3,275 shares, at \$100 per share, on which has been paid into Loan Fund	105,987 05
18. (e) Profits or accrued interest on 17, less shown in (25), and credited or appropriated but not yet paid	2,738 98
20. (g) Instalment stock, less shown in (24), total issue now in force, 11,219 shares, at \$100 per share, on which has been paid into the all \$, of which sum there has been paid into the Loan Fund	326,056 58
24, 25. Liability in respect of terminating stock or shares (fully paid, prepaid, or instalment), other than shown in (14), (17) and (20), as to which the Corporation has received notice of withdrawal, but at 31st December, 1904, had not paid off, viz.:	
24. Principal sum due by Corporation	2,359 84
25. Interest, profits or dividends due by Corporation	17 20

C.—Liabilities to Stockholders or Shareholders other than as already shown under A or B, viz.:

26. Interest paid in advance	117 48
	437,277 13
	\$1,999,288 46

BALANCE SHEET.—Continued.

Capital and Liabilities.—Continued.

Liabilities to the Public.		
27. Deposits: Payable on notice	\$3,126	23
29. Debentures issued in Canada	225,700	00
30. Interest accrued on (29)	2,138	59
37. Owing to banks (including interest due or accrued)	7,000	00
39. Due to pay assumed mortgages	9,500	00
40. Other liabilities to the public:		
41. (a) Sundry accounts	634	06
42. (b) Reserve new loaning plan	7,899	60
		<u>\$255,998 48</u>
Total liabilities		<u>\$1,355,286 94</u>

Cr.	Assets.
I.—Assets of which the Corporation is the Beneficial Owner.	
A.—Immovable Property Owned Beneficially by Corporation.	
2. (i) Office premises at Toronto, held in freehold	\$35,000 00
B.—Debts secured by mortgages of land.	
9. (a) Debts (other than item 10) secured by mortgages of land	\$1,217,441 on
10. (b) Debts secured by mortgaged land held for sale	6,107.52
11. (c) Interest due or accrued on items 9 and 10 and not included therein	14,165 65
	<u>1,237,715 07</u>
C.—Debts not above enumerated for which the Corporation holds securities as follows:	
20. (h) Debts secured only by permanent stock or shares of the Corporation	10,585 70
21. (i) Debts secured only by terminating stock or shares of the Corporation	8,465 24
22. (j) Debts secured by other bonds and debentures	2,162 05
23. (k) Agents balances secured by bonds	3,169 59
26. (n) Interest due or accrued on items 20 and 22 and not included therein	745 86
	<u>46,120 34</u>
D.—Unsecured Debts.	
27. (a) Rent accrued	130 00
	<u>130 00</u>
E.—Cash.	
31. (a) On hand	1,577 03
32. (b) In banks	30,244 50
	<u>31,821 53</u>
F.—Assets not hereinbefore mentioned.	
37. (a) License and charter account (not extended) \$1,833.29	
38. (b) Office furniture	1,000 00
39. (c) Conversion account	3,500 00
	<u>4,500 00</u>
Total assets	<u>\$1,355,286 94</u>

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.			
	(Col. 1.)	(Co. 2.)	Col. 3.) Total (Col. 4.)
A.—Balance from 31st December, 1903.			
(b) Cash (not already shown under (1)):			
2. (i) On hand			\$327 24
3. (ii) In bank			26,521 39
B.—Sums received Wholly or Partly on Capital Stock.			
4. (a) Calls on permanent capital stock			750 00
5. (b) Premiums on 4 and 24			443 44
7. (d) Sales of prepaid building society stock		3,078 91	
8. (e) Dues on instalment building society stock		59,492 68	
			62,571 59

CASH ACCOUNT.—Continued.

Receipts for the year ending 31st December, 1904.—Continued.

C.—Receipts on Account of Investments, Loans or Debts.			
(a) On mortgages of realty:			
10. (i) Principal	116,932 04		
11. (ii) Interest	93,434 53		
(b) On other securities:			
12. (i) Principal	6,157 59		
(c) Secured debts:			
Agents' advances repaid	55 54		
D.—Receipts from Real Estate Owned Beneficially by Corporation.			
16. (a) Sales	668 63		
17. (b) Rents	800 00		
E.—Miscellaneous.			
18. (a) Commission, brokerage (or remunera- tion as corporate agent or trustee).	1,160 24		
Reserve new loaning plan	7,346 79		
24. (g) Conversion of terminating stock into permanent stock		16,809 81	
			18,003 25
F.—Borrowed Money.			
25. (a) Bank or other advances, discounts or overdrafts	3,000 00		
26. (b) Borrowed by taking deposits	3,321 23		
27. (c) Borrowed on debentures	50,600 00		
G.—Receipts from other sources, viz.:			
30. (a) Transfer fees	36 00		287,759 64
(b) Expense fund, less amount retained by and paid to agents	4,248 06		
Totals	\$287,759 64	\$62,571 59	\$18,003 25 \$395,183 11

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.			
A.—Sums Loaned or Invested on Capital Account.			
	(Col. 1.)	(Col. 2.)	Total (Col. 4.)
1. (a) Loaned on mortgages of realty	\$177,335 17		
(b) Loaned or invested in other securities	25,085 17		
6. (c) Improvements to office premises, Toronto	148 00		
7. (d) Incumbrances on realty paid off	500 00		
B.—Expended on Stock Account.			
8. Dividends paid on permanent stock	36,271 36		
9. Dividends paid on terminating stock	6,597 49		
11. Paid for terminating stock withdrawn		61,832 97	
13. Profits paid on (11)		2,771 11	
16. Terminating stock converted into permanent		16,809 81	
			\$81,413 89
C.—Borrowed Money.			
18. (a) Bank account: Principal and interest	774 20		
19. (b) Deposits: Principal	194 99		
20. (c) Debentures issued in Canada—principal, \$2,900; in- terest, \$9,052	11,952 00		
D.—Management Expenses (other than foregoing).			
25. (a) Salaries, wages and fees	10,443 10		
26. (b) Commission or brokerage	4,379 78		
27. (c) Advances to agents	2,050 00		
28. (d) Stationery, postage, printing and advertising	1,512 30		
29. (e) Law costs	64 80		
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	2,127 94		
31. (g) Travelling expenses	101 25		
33. (i) Other management expenditure	2,204 95		
E.—Other Expenditures, viz.:			
33. (a) Office furniture	205 19		
F.—Balance.			
(b) Cash on hand and in banks	31,821 53		313,769 92
Totals	\$313,769 22	\$81,413 89	\$395,183 11

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$5,500.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. \$7,100.00.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 3½ per cent; on debentures, 4½ and 5 per cent.; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty and on other securities, 7 4-5, 8 2-5 and 9 per cent.
7. Of the mortgages held by the Corporation, \$211,485.71 is on realty situate in Ontario, and \$1,005,956.19 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$1,962.85.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$2,378,480.
11. How often are the securities held by the Corporation valued? When default is made in payment.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$3,000; Secretary, \$3,000; Accountant, \$1,000; and Clerks, \$2,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? Monthly during year 1904.
14. Names and addresses of the auditors for 1904: W. H. Cross, F.C.A., Toronto, Ont.; S. J. Stammers, Toronto, Ont. For 1905: W. H. Cross, F.C.A., and S. J. Stammers.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 30th June, and 31st December.
16. What is the date appointed for the Annual Meeting? 6th March, 1905.
17. Date of last Annual Meeting? 7th March, 1904.

THE SUN AND HASTINGS SAVINGS AND LOAN COMPANY OF ONTARIO.

Head Office, Toronto, Ont.

This Company was formed by the amalgamation of the two Provincial Companies described in the Report of the Registrar of Loan Corporations for 1901 under the respective titles; "The Sun Savings and Loan Company of Ontario" and "The Hastings Loan and Investment Society."

The deed of amalgamation, after ratification by the shareholders of the respective companies, was on the 27th day of August, A.D. 1902, assented to by the Lieutenant-Governor of Ontario-in-Council. (R.S.O., 1897, c. 205, s. 44.)

The lending and borrowing powers are governed by the Loan Corporations Act, R. S. O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of The Sun and Hastings Savings and Loan Company of Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 4 Richmond Street East, in the City of Toronto, in the Province of Ontario.

The Board is constituted of nine directors holding office for one year or until their successors are appointed.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Whitford Vandusen, President, Toronto Junction; 15th Feb., 1904; 20th Feb., 1905		
Ambrose Kent, Vice-President, Toronto;	"	"
Sir Mackenzie Bowell, K.C.M.G., P.C., Director, Belleville;	"	"
Rev. A. A. Campbell, Director, Belleville;	"	"
W. J. Fawcett, Director, Bridgen;	"	"
H. W. Aikins, M.D., Director, Toronto;	"	"
W. P. Hudson, K.C., Director, Belleville;	"	"
J. T. Gilmour, M.D., Director, Toronto;	"	"
W. Pemberton Page, Managing-Director, Toronto;	"	"

A.—Permanent capital stock: Total amount authorized, \$2,000,000.00; total amount subscribed, \$570,200.00, as more particularly set out in Schedule A. hereto.

SCHEDULE A.

(a) Fixed and Permanent Capital Stock created by virtue of Building Society Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid.
		\$	\$	\$ c.	\$ c.
1. Fully called.....	5,341	100	534,100	503,426 91	30,673 09
	16	10	160	160 00	
3 Instalment stock (payable by fixed periodical payments and still in process of payment).....	860	100	36,000	2,503 45	33,496 55
Totals.....	5,717		570,260	506,090 36	64,169 64

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

SCHEDULE B.
Terminating or Withdrawable Stock.

Shares of terminating or withdrawable stock.	Fully paid.		Prepaid.		Instalment.		Total.
	No.	Amount.	No.	Amount.	No.	Amount.	
Number and amount in force 31st Dec. 1903.....	53	\$ 5,300	2,558	\$ 255,800	12,158	\$ 1,215,800	\$ 1,476,900
Number and amount issued during 1904.....			209	20,900			20,900
Gross total in force at any time in 1904.....	53	5,300	2,674	276,700	12,158	1,215,800	1,497,800
	No. of shares.						
	Amount.						
Deduct as follows:							
Withdrawn and paid off during 1904.....	1,431	143,100	93	9,300	1,338	133,800	143,100
Forfeited and lapsed during 1904.....	782	78,200			782	78,200	78,200
Total deduction.....	2,213	221,300	93	9,300	2,120	212,000	221,300
Net total remaining in force at 31st Dec. 1904.....	53	5,300	2,674	276,400	10,038	1,003,800	1,276,500

Summary of Terminating or Withdrawable Stock in Force 31st December, 1904.

53 shares fully paid stock at \$100 per share, \$5,300, on which 5 shareholders have paid in \$5,300; carried to loan fund, \$4,800.
 2,674 shares prepaid stock at \$100 per share, \$267,400, on which 293 shareholders have paid in \$159,200; carried to loan fund, \$154,825.89.
 10,038 shares instalment stock at \$100 per share, \$1,003,800, on which 1,739 shareholders have paid in \$247,200.30; carried to loan fund, \$194,355.01. Total carried to loan fund, \$353,960.90.
 Total amount distributed or credited in 1904:
 (1) As interest, \$8,511.96.
 Rate of such interest, per cent. per annum, 5 and 6 per cent.
 (2) As dividends out of profits, \$20,135.01.
 Rate or rates per cent. of such dividends, 10 per cent. on instalment and \$50 prepaid stock; and 4 per cent. on \$60 prepaid stock.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).		
A.—Permanent Capital Stock or Shares.		
1. (a) Permanent stock: Total subscribed, \$534,100; total paid thereon.....	\$503,586 91	
4. (d) Dividends declared in respect of (1) and (8) but not yet paid..	14,697 15	
8. (h) Instalments permanent stock (payable by fixed periodical payments); Total subscribed, \$36,000, on which has been paid.....	2,503 45	
9. (i) Dividends declared on (8) but not yet paid included in (4).....		\$520,787 51
B.—Terminating Capital Stock or Shares.		
14. (a) Full paid stock, less shown in (24): Total in force, 53 shares at \$100 per share, carried to loan fund.....	4,800 00	
15. (b) Profits and accrued interest on (14), credited or appropriated but not yet paid.....	159 00	
17. (d) Prepaid stock less shown in (24): Total in force, 2,674 shares at \$100 per share, on which has been paid into loan fund..	154,825 89	
18. (e) Profits or accrued interest on (17) less shown in 25, credited or appropriated but not yet paid.....	3,966 99	
20. (g) Instalment stock less shown in (24): Total issue now in force, 10,038 shares at \$100 per share, \$1,003,800, on which has been paid in all, \$247,200.30, of which sum there has been paid into loan fund.....	194,355 01	
22. (i) Profits or accrued interest on (20) not credited or appropriated.....	22,341 17	
		380,448 06
C.—Liabilities to Stockholders or Shareholders other than as already shown under A or B, viz.:		
24. Sundry accounts.....	5,029 71	
25. Paid up certificates.....	2,944 06	
26. Reserve, \$35,000; contingent, \$10,000 less \$350 (not extended)....	44,650 00	52,623 77
		963,859 34
Liabilities to the Public.		
27. Deposits.....	142,159 53	
29. Debentures issued in Canada.....	52,440 00	
30. Interest due or accrued on (29).....	1,062 33	
		195,661 86
Total Liabilities.....		\$1,149,521 20

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by mortgages of land.

9. (a) Debts (other than item 10) secured by mortgages of land including disbursements secured	\$1,017,772 39	
10. (bb) Debts secured by land held by the Company as Mortgagee in possession, or secured by land for the rents and profits of which the Company is accountable	77,841 97	
11. (c) Interest due or accrued on items 9 and 10 and not included therein	25,131 63	\$1,120,745 99

C.—Debts not above enumerated for which the Corporation holds securities as follows:

21. (i) Debts secured only by terminating stock or shares of the Corporation		8,744 00
--	--	----------

E.—Cash.

31. (a) On hand	1,555 83	
32. (b) In banks	16,775 38	18,331 21

F.—Assets not hereinbefore mentioned.

37. (a) Office furniture, supplies, etc.	1,700 00	1,700 00
39. (c) Registration unearned portion (not extended) \$350		

Total assets \$1,149,521 20

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

	(Col. 1.)	(Col. 2.)	(Col. 3.)	Total (Col. 4.)
A.—Balance from 31st December, 1903.				
1. (d) Cash (not already shown under (1a):				
2. (i) On hand	\$1,597 82			
3. (ii) In bank	18,042 27			\$19,640 09

B.—Sums received Wholly or Partly on Capital Stock.

4. (a) Calls permanent capital			17,049 83	17,049 83
7. (d) Sales of prepaid building society stock	3,470 40	8,116 48		
8. (e) Dues on instalment building society stock	8,142 66	45,742 14		65,471 68

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:				
10. (i) Principal		222,616 79		
11. (ii) Interest		70,503 01		
(b) Other securities:				
12. (i) Principal		2,280 80		295,400 60

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales		8,219 64		
17. (b) Rents		1,657 67		9,877 31

E.—Miscellaneous.

18. (a) Commission	854 52			854 52
19. (b) Premium on bonus or loans		1,961 07		1,961 07
21. (d) Fines	865 92			865 92

F.—Borrowed Money.

26. (b) Borrowed by taking deposits		95,142 08		
27. (c) Borrowed on debentures		6,200 00		101,342 08

G.—Receipts from other sources, viz.:

30. (a) Valuation fees, \$115; repaid by collectors, etc., \$652.28	797 28			
(b) Discharge mortgage, \$211; bank interest, \$507.71	718 71			
(c) Gain on property sold, \$870.11; accounts repaid, \$770.88	1,640 99			3,156 98
Received on behalf of Empire Loan Co.		17,183 64		17,183 64

Totals \$36,130 57 \$479,623 32 \$17,049 83 \$532,803 72

REPORT OF REGISTRAR OF LOAN CORPORATIONS. No. 11

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.			
	(Col. 1.)	(Col. 2.)	(Col. 4.)
A.—Sums Loaned or Invested on Capital Account.			
1. (a) Loaned on mortgages of realty		\$214,187 84	\$214,187 84
2. (b) Loaned or invested in other securities, viz:			
3. (i) Stock loans		1,232 00	1,232 00
6. (c) Real estate transferred from mortgage account		11,853 21	11,853 21
7. (e) Insurance or taxes advanced on property mortgaged to the Corporation		9,955 53	9,955 53
B.—Expended on Stock Account.			
8. Dividends paid on permanent stock	28,043 32		28,043 32
9. Dividends paid on terminating stock	8,511 96		8,511 96
11. Paid for terminating stock withdrawn		40,451 63	40,451 63
C.—Borrowed Money and Interest thereon paid.			
18. (a) Bank account: Principal and interest		18,580 21	18,580 21
19. (b) Deposits: Principal, \$114,058.25; Interest, \$5,229.35.		119,287 60	119,287 60
20. (c) Debentures issued in Canada: Principal, \$5,000; interest, \$2,485.30		7,485 30	7,485 30
D.—Management Expenses (other than foregoing).			
25. (a) Salaries, wages and fees	10,446 79		
25. (b) Commission	7,969 58		
27. (c) Advances to agents	150 00		
28. (d) Stationery, postage, printing and advertising	1,995 08		
29. (e) Law costs	396 97		
30. (f) Rent	672 00		
31. (g) Travelling expenses	187 10		
32. (h) Registration fees, etc.	752 65		
33. (i) Other management expenditure	1,446 77		
			24,016 84
E.—Other Expenditures, viz:			
34. (a) Discharge mortgage, \$278; short remitted, \$407.35 ..	685 35		
35. (b) Valuation fees	53 00		
36. (e) Loss or property sold	1,975 20		
Disbursements on account of Empire Loan Co.	28,173 52		
			30,887 07
F.—Balance.			
37. (a) Cash on hand and in banks	18,311 21		18,311 21
Totals	\$109,770 40	\$423,033 32	\$532,803 72

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$5,000.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, $3\frac{1}{2}$ per cent.; on debentures, $4\frac{1}{2}$ per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 10 per cent.; on other securities, 12 per cent.
7. Of the mortgages held by the Corporation, \$736,997.34 is on realty situate in Ontario, and \$265,409.30 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$14,589.76.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation, estimated, \$1,902,465.69.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$5,000; Cashier, \$2,000. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904: James F. Lawson and J. L. Atkinson, Toronto, Ont. For 1905: James F. Lawson and J. L. Atkinson, Toronto, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 1st January and 1st July. 5 per cent and 6 per cent.
16. What is the date appointed for the Annual Meeting? Third Monday in February.
17. Date of last Annual Meeting? 15th February, 1904.

III. LOANING LAND COMPANIES.

DETAILED REPORTS OF THE SEVERAL COMPANIES.

THE DOVERCOURT LAND, BUILDING AND SAVINGS COMPANY, LIMITED.

Head Office, Toronto, Ontario.

Incorporated on the 16th December, 1885, by Letters Patent of Ontario (Lib. 17, No. 115), issued under the Ontario Joint Stock Companies Letters Patent Act, R.S.O., 1897, c. 150.

For the lending powers see statement of the objects in the above instrument.

For the borrowing powers see paragraphs 25 to 28 of the same.

ANNUAL STATEMENT

Of the condition and affairs of The Dovercourt Land, Building and Savings Company, Limited, of Toronto, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 24 Adelaide Street East, in the City of Toronto, in the Province of Ontario.

The Board is constituted of three directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Richard H. Green, President, Toronto, 31st December, 1904; February, 1906
 Albert M. Wickens, Vice-President, Toronto; " "
 Alexander J. Williams, Director and Manager, Toronto; " "

A.—Permanent capital stock: Total amount authorized, \$500,000; total amount subscribed, \$63,900.00, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed Permanent Capital Stock created by virtue of Joint Stock Companies Act or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
		\$	\$	\$	\$
2. Fully called	1,278	50	63,900	63,900	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$63,900;
 total paid thereon \$63,900 00

Liabilities to the Public.

40. Other liabilities to the public, viz.:—

41. (a) Mortgages payable and interest..... 7,586 04
 42. (b) Sundry accounts and taxes 937 50

Total actual liabilities (forward) \$72,423 54

BALANCE SHEET.—Liabilities.—Continued

Total actual liabilities (brought forward)	\$72,423 54
Contingent Liabilities.	
48. Money for which the Corporation is contingently liable, viz.:—	
Mortgages, interest and taxes	\$8,377 13
<p>“This amount is for mortgages on sales or purchases of land made some years ago and which mortgages contain the covenant of the Company to pay. We, however, consider that properties covered by them and collateral security held by us are sufficient to cover all our liabilities.”</p>	
Total contingent liabilities	\$8,377 13

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.	
A.—Immovable Property Owned Beneficially by Corporation.	
5. (b) Freehold land including buildings (other than foregoing) principally vacant lands	\$30,350 00
B.—Debts secured by Mortgages of Land.	
9. (a) Debts (other than item 10) secured by mortgages of land, being mortgages and agreements principally for balances on sales of land and interest and charges	5,487 58
C.—Debts not above enumerated for which the Corporation holds securities as follows:	
16. (d) Debts secured by Loan Corporations debentures	2,452 30
D.—Unsecured Debts.	
27. (a) Rents	476 65
E.—Cash.	
31. (a) On hand	3 28
32. (b) In bank	113 60
F.—Assets not hereinbefore Mentioned.	
40. (d) Profit and loss balance	33,540 13
Total assets owned beneficially by Corporation	\$72,423 54
II.—Assets not owned Beneficially by Corporation but for which the Corporation is Accountable. (See Note under Contingent Liabilities)	

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.	
A.—Balance from 31st December, 1903.	
3. (ii) In bank	\$ 128 44
B.—Sums received wholly or partly on Capital Stock.	
4. (a) Calls on joint stock permanent capital	28 57
C.—Receipts on account of Investments, Loans or Debts.	
(a) On mortgages of realty:—	
10. (i) Principal (mortgages and agreements)	3,489 50
11. (ii) Interest and rents	275 96
F.—Borrowed Money.	
29. (e) Sundry loans	194 29
G.—Receipts from other sources, viz.:	
30. (a) Sundry accounts	146 29
Totals	\$4,263 05

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

7. (d) Incumbrances on realty paid off	(Col. 1.) \$ 895 00
--	------------------------

C.—Borrowed Money.

23. (f) Interest on mortgages	607 09
24. (g) Guarantees on mortgages	241 98

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees and auditors	840 00
26. (b) Commission or brokerage	71 25
28. (d) Stationery, postage, printing and advertising	14 56
29. (e) Law costs	139 57
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	932 85
32. (h) Registration fees	35 00

E.—Other Expenditures, viz.:

34. (a) Purchasers proportion of proceeds of sale	262 67
35. (b) Directors	100 00
36. (c) Sundry	6 20

F.—Balance.

38. (b) Cash on hand and in bank	116 88
Totals	\$4,263 05

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. Liabilities practically all due.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$180.00.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, none; on debenture, none.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, about 6 per cent.; on other securities, 4 per cent.
7. Of the mortgages held by the Corporation all are on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation? Principally vacant land or vacant land securities on same. Impossible to place cash value on the assets of this Company.
12. (a) What officers of the Corporation are under bond and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905. For 1904: S. E. Townsend, Toronto, Ont.; F. J. Lightbourn, Toronto, Ont. For 1905: Not yet appointed.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively?
16. What is the date appointed for the Annual Meeting? 27th February, 1905.
17. Date of last Annual Meeting? 9th February, 1904.

THE LAND SECURITY COMPANY.

Head Office, Toronto.

CONSTATING ACTS OR INSTRUMENTS.

1873. Special Act of Incorporation, 36 V. c. 128 (O.), under the name of The Toronto House Building Association.

1882. 45 V. c. 80 (O.), changing the corporate name to The Land Security Company; increasing capital stock and amending powers.

1885. 48 V. c. 82 (O.), amending powers.

1889. 52 V. c. 86 (O.), increasing capital stock; authorizing conversion of existing shares into new shares, and amending powers.

1890. 53 V. c. 132 (O.), increasing capital stock to \$5,000,000; defining rights of transferee on transmission of shares by death, etc.

1896. 59 V. c. 113 (O.), changing ordinary shares into preference shares; dividing existing shares, etc.

For the lending powers see 48 V. c. 82 (O.), secs. 1, 2; and 52 V. c. 86 (O.), s. 5.

For the borrowing powers see 36 V. c. 128 (O.), s. 5, as amended by 45 V. c. 80 (O.), s. 5, and by 48 V. c. 82 (O.), s. 2; and see 59 V. c. 113 (O.), secs. 10 to 13.

ANNUAL STATEMENT

Of the condition and affairs of the Land Security Company, of Toronto, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 44 Victoria Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Robert Jaffray, President, Toronto, Ont.; 2nd February, 1904; 1st February, 1905

Edward Galley, Vice-President, Toronto, Ont.;

Hon. Chancellor Sir J. A. Boyd, Director, Toronto, Ont.; " "

Fred. J. Stewart, Director, Toronto, Ont.; " "

W. G. Jaffray, Director, Toronto, Ont.; 21st June, 1904; 1st February, 1905

Ferguson J. Dunbar, Director, Toronto, Ont.; 2nd February, 1904; 1st February, 1905

Edward R. Greig, Managing Director, Toronto, Ont.; 21st June, 1904; 1st Feb. 1905

A.—Permanent capital stock; total amount authorized, \$5,000,000; total amount subscribed, \$1,382,300, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies Acts or Private Acts.

Last call made: Date 15th Oct., 1896; rate per cent. 10; gross amount \$138,230; amount paid thereon. \$85,017.49.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
		\$	\$	\$ c.	\$ c.
1. Preference stock	19,777	10	197,770	197,770 00	
2. Partly called	2,494	100	249,400	104,564 87	Orig. 40% 1,141 94
3. " "	3,646	90	328,140	152,157 49	
4. " "	6,934	80	555,040	277,520 00	Call of '95 21,983 19
5. " "	709	70	49,630	28,350 03	" '96 53,212 51
6. " "	32	60	1,920	1,280 00	
Totals	13,823		1,382,300	761,652 36	76,337 64

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Preference stock capital fully called; total paid thereon, \$197,770	} \$761,652 36	
2. (b) Ordinary joint stock capital, per cent. called; total paid thereon, \$563,882.36		
(cc) Joint stock capital paid in advance of calls, \$8,610 of preference stock.		
		\$761,652 36

Liabilities to the Public.*

27. Deposits	\$15,257 57	
28. Interest on deposits, due or accrued or capitalized	163 06	
29. Debentures issued in Canada	150,007 50	
30. Interest due and accrued on (29)	1,998 56	
31. Debentures issued elsewhere than in Canada	433,503 23	
32. Interest due and accrued on (31)	3,095 50	
40. Other liabilities to the public, viz. :—		
41. (a) Mortgages on real estate	22,700 00	
42. (b) Interest accrued	245 81	
		626,971 23
Total liabilities		\$1,388,623 59

*Specially secured by instrument dated 26th October, 1897, executed between the company and certain trustees.

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

5. (b) Freehold land (including buildings) other than foregoing....	\$740,483 86	
6. (c) Leasehold land (including buildings) other than foregoing....	159,784 06	
		\$900,267 92

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land..	\$180,025 87	
10. (b) Debts secured by mortgaged land held for sale	5,109 67	
(bb) Debts secured by land held by the Company as mortgagees in possession, or secured by land for the rents and profits of which the Company is accountable	20,473 53	
11. (c) Interest due and accrued on (9)	1,697 01	
		207,306 08

C.—Debts not above enumerated for which the Corporation holds securities as follows:

20. (h) Debts secured only by permanent stock or shares of the Corporation	\$17,489 49	
22. (j) Debts secured by loans on stock	34,747 69	
26. (n) Interest due or accrued on items 20 and 22 and not included therein	119 03	
		52,356 21

E.—Cash.

32. (b) In bank, London, England	\$104 65	
In bank, Toronto	508 02	
		612 67
Balance of profit and loss account		228,080 71
Total		\$1,388,623 59

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

(Total Col. 4.)

(b) Cash (not already shown under (1)) :—		
3 (ii) In bank		\$ 127 80

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on joint stock permanent capital		727 14
---	--	--------

CASH ACCOUNT.—Continued.

Receipts for the year ending 31st December, 1904.

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—	
10. (i) Principal	67,270 18
11. (ii) Interest	9,205 25
(b) On other securities:—	
13. (ii) Interest or dividends	2,444 68

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales (not included in any of the foregoing items)	43,966 90
18. (b) Rents	56,701 11

F.—Borrowed Money.

Special advances from bank	55,000 00
29. (e) Borrowed otherwise: Mortgages on real estate	20,000 00

G.—Receipts from other sources, viz.:

30. (a) Fire losses paid (insurance)	128,607 75
(b) Sale of salvage	3,184 30
Totals	\$387,235 11

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

(Col. 1.) (Total Col. 4.)

(b) Loaned or invested in other securities, viz.:—	
2. (i) Maintenance of loans cared for by Company	\$2,673 71
7. (d) Incumbrances on realty paid off	21,500 00

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

19. (b) Deposits: Principal, \$60,685.80; interest, \$1,038.43	61,724 23
20. (c) Debentures issued in Canada: \$81,680.50; interest, \$8,826.66	90,507 16
21. (d) Debentures issued elsewhere: Principal, \$144,552.14; interest, \$23,533.37	168,085 51

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	\$6,353 51
28. (d) Stationery, postage, printing and advertising	249 25
29. (e) Law costs	290 97
32. (h) Registration fees	130 00
33. (i) Other management expenditure	107 41
	7,131 14

E.—Other Expenditures, viz.:

34. (a) Charges on sterling debentures	2,004 72
35. (b) Interest on mortgage payable	901 59
36. (c) Maintenance of real estate	31,990 42
(d) Refunded and overdue accounts	13 96

F.—Balance.

(b) Cash in various banks	612 67
Totals	\$387,235 11

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. Extended.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. Extended.
3. Amount of other existing obligations of the Corporation which will mature in 1905. Extended.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$24,082.53.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 4.85 per cent.; on debentures, 4.43 per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, about 5 per cent.
7. Of the mortgages held by the Corporation all are on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904. Transferred, \$25,550.00; written off, \$13,849.55.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation. \$223,159.36.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? 31st December, 1904, (and monthly throughout year.)
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904: W. F. Davison, Toronto, Ont.; R. F. Spence, F.C.A., Toronto, Ont. For 1905: W. F. Davison, Toronto, and R. F. Spence, F.C.A., Toronto, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? No dividends paid.
16. What is the date appointed for the Annual Meeting? 1st Tuesday in February in each year.
17. Date of last Annual Meeting? 2nd February, 1904.

THE PROVIDENT INVESTMENT COMPANY.

Head Office, Toronto, Ontario.

Incorporated on 3rd November, 1893, by Letters Patent of Ontario, issued under the Ontario Joint Stock Companies' Letter Patent Act (R.S.O. 1887, c. 157).

For the lending and borrowing powers see the Letters Patent (which contains special limitations.)

ANNUAL STATEMENT

Of the condition and affairs of The Provident Investment Company, at the 31st of December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 26 King Street East, in the city of Toronto, in the Province of Ontario.

The Board is constituted of five directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Hon. Geo. A. Cox, President, Toronto;	19th January, 1905; 18th January, 1906.
H. C. Cox, Vice-President, Toronto;	" "
E. W. Cox, Director, Toronto;	" "
F. G. Cox, Director, Toronto;	" "
E. R. Wood, Director, Toronto;	" "
E. R. Wood, Manager, Toronto.	
G. A. Morrow, Secretary, Toronto.	

*A.—Permanent capital stock; Total amount authorized, \$1,800,000; total amount subscribed, \$100,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b)—Fixed and permanent capital stock created by virtue of Joint Stock Companies' Acts or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
		\$	\$	\$	\$
1. Fully called	1,000	100	100,000	100,000	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$100,000;	
total paid thereon	\$100,000 00
5. (e) Unappropriated profits in respect of (1)	35,521 37
	<u>\$135,521 37</u>

Liabilities to the Public.

37. Loans against security of bonds, stocks and debentures	249,550 71
Total liabilities	<u>\$385,072 08</u>

*The subscribed and paid up capital was reduced by By-law No. 27 (confirmed by Order in Council, Ontario, 31st March, 1903), to \$100,000.

BALANCE SHEET.—Continued.

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

5. (b) Freehold land (including buildings) other than foregoing ..	\$32,350 62	
7. (d) Rents accrued (re 5b)	136 00	
		\$32,486 62

B.—Debts secured by Mortgages of Land.

9. (b) Debts (other than item 10) secured by mortgages of land		2,902 90
11. (c) Interest due or accrued on item 9 and not included therein. (See (28b)		

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Loans on bonds, stocks and debentures		258,098 89
27. (a) Bonds, stocks and debentures owned by the Company	\$88,144 55	
28. (b) Accrued interest on bonds, stocks, debentures and loans	2,053 08	
		90,197 63

E.—Cash.

31. (a) On hand	\$ 128 81	
32. (b) In bank	1,257 23	
		1,386 04
Total assets		\$385,072 08

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(1) Cash (not already shown under (1)) :—		
2. (i) On hand	\$ 57 10	
3. (ii) In bank	1,133 03	
		\$1,190 13

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—		
10. (i) Principal	\$ 391 66	
11. (ii) Interest, including interest on loans of stock	16,648 78	
(b) Bonds, stocks and debentures owned by Company :—		
12. (i) Principal	342,176 80	
13. (ii) Interest or dividends	6,499 54	
14. (c) (i) Loans secured by bonds, stocks and debentures	221,811 98	
15. (ii) Interest, included in item 11.		
		587,528 76

D.—Receipts from Real Estate owned Beneficially by Corporation.

16. (a) Sales (not included in any of the foregoing items)	\$6,320 00	
17. (b) Rents	1,616 86	
		9,936 86

F.—Borrowed Money.

25. (a) Bank or other advances		188,279 59
Total		\$786,935 34

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty	(Col. 1.)	(Total) Col. 4.)
(b) Loaned or invested in other securities, viz. :—	\$	710 72
2. (i) Loaned on security of bonds, stocks and debentures		192,424 75
4. (iii) Purchase of bonds and stocks		348,309 85
6. (c) Real estate purchased		2,139 63

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:		
18. (a) Repayment of bank advances, principal	\$226,031 12	
Repayment of bank advances, interest	13,815 33	
		239,846 45
D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	\$387 79	
29. (e) Law costs	21 87	
32. (h) Fees	120 00	
		529 66
E.—Other Expenditures.		
34. (a) Taxes	\$1,459 20	
35. (b) Fuel, rent, water rates, etc.	28 00	
36. (c) Repairs and improvements	101 04	
		1,588 24
F.—Balance.		
37. (a) Cash on hand and in bank		1,396 04
Totals		\$786,935 34

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. Nil.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. Nil.
3. Amount of other existing obligations of the Corporation which will mature in 1905. Nil.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. Nil.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, nil; on debentures, nil; on debenture stock, nil.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 5 per cent.; on other securities fluctuates.
7. Of the mortgages held by the Corporation, \$2,880.68 is on realty situate in Ontario, and none elsewhere.
8. Loans written off or transferred to real estate account during 1904. Nil.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. Nil.
10. Aggregate market value of the land mortgaged to the Corporation, \$5,000.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Managing Director, \$5,000; Secretary, \$5,000; Accountant, \$3,500; and Book-keeper, \$1,500. By Guarantee Company.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904: W. S. Hodgins and R. E. Moody, Toronto. For 1905: W. S. Hodgins and R. E. Moody, Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively?
16. What is the date appointed for the Annual Meeting?
17. Date of last Annual Meeting?

THE SCOTTISH ONTARIO AND MANITOBA LAND COMPANY (LIMITED).

Head Office, Glasgow, Scotland.

CONSTATING INSTRUMENTS.

Certificate of incorporation (15th Dec., 1879), issued by Registrar of Joint Stock Companies for Scotland, under the Companies' Act, 1862, 1867 and 1877.

Memorandum of Association and Articles of Association (both of the 12th Dec., 1870) under the above Acts and amendment to 73rd Article made 24th April, 1882.

For the lending and borrowing powers see the Memorandum of Association and the Articles of Association and the (Imp.) Companies' Act 1862 to 1893; also for transactions in Ontario, see the Loan Corporations Act, R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Scottish Ontario and Manitoba Land Company (Limited), of Glasgow, Scotland, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Company is at No. 205 St. Vincent Street, in the City of Glasgow, Scotland.

The chief agency for Ontario is situate at No. 9 Toronto Street, in the City of Toronto, in the Province of Ontario.

The Chief Agents and Attorneys for Ontario are Thomas Langton, Herbert Macdonald Mowat, and Roderick James Maclean (or any one of them), and their address is No. 9 Toronto Street, Toronto, in the Province of Ontario.

The Board is constituted of five directors holding office for three years.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective term of office:

Hugh Wright, Chairman, Altiery, Scotland;	April, 1902, to April, 1905.
Robert Anderson, Director, Glasgow;	April, 1903, to April, 1906
Geo. D. Sterling, C.A., Director, Glasgow;	April, 1904, to April, 1907
David Sturrock, Director, Glasgow;	April, 1904, to April, 1906
R. W. Henry, Director, Glasgow;	April, 1904, to April, 1905
James Muirhead, Secretary, Glasgow.	

A.—Permanent capital stock: Total amounts authorized, \$2,433,333.33; total amount subscribed, \$783,976.20, as more particularly set out in Schedule A hereto.

SCHEDULE A.

“(b) Fixed and Permanent Capital Stock created by virtue of Joint Stock Companies' Act or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
		£	\$ c.	\$ c.	\$ c.
2 Partly called stock	23,013	7 stg.	783,976 20	671,979 59	111,996 61

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

*Under an Imperial Act the Company has been making repayments to its shareholders.

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Capital and Liabilities.			
Capital (Liabilities to Stockholders or Shareholders).			
A.—Permanent Capital Stock or Shares.			
2. (b) Ordinary joint stock capital, 85.7 per cent. called; total called, \$671,979.59; total paid thereon	\$671,979 59		
6. (f) Reserve fund in respect of (2)	12,166 66		
7. (g) Contingent fund in respect of (2)	115,898 77		
Unclaimed repayments to shareholders	476 93		
			800,521 95
Liabilities to the Public.			
40. Other Liabilities to the public, viz.:—			
(a) Sundry open accounts	\$3,670 71	3,670 71	
Total liabilities			\$804,192 66
Cr.		Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.			
A.—Immovable Property owned Beneficially by Corporation.			
5. (b) Freehold land (including buildings) other than foregoing ..			\$629,061 99
B.—Debts secured by Mortgages of Land.			
9. (a) Debts secured by mortgages of land	\$218,829 91		
11. (c) Interest due or accrued on item (9) and not included therein ..	8,016 34		
			226,846 25
D.—Unsecured Debts.			
27. (a) Sundry open accounts	8,313 48	8,313 48	
E.—Cash.			
31. (a) On hand	\$ 26 82		
32. (b) In bank	39,797 75		
			39,824 57
F.—Assets not hereinbefore Mentioned.			
W. (a) Office furniture			156 37
Total assets			\$804,192 66

CASH ACCOUNT.

Receipts in Ontario only for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.			
A.—Balances from 31st December, 1903.			(Total Col. 4.)
2. (b) Cash (not already shown under (1)) :—		\$	122 31
(i) On hand			
C.—Receipts on account of Investments, Loans or Debts.			
(a) On mortgages of realty :—			
10. (i) Principal		644 00	
11. (ii) Interest		454 35	
D.—Receipts from Real Estate Owned Beneficially by Corporation.			
16. (a) Sales		7,642 96	
17. (b) Rents		11,502 63	
G.—Receipts from other sources, viz. :			
30. (a) Received from Winnipeg office		14,500 00	
(b) Ancient Lights, York Chambers		1,060 00	
(c) Share of disbursements to 31st Dec., 1903		2,603 92	
Miscellaneous		337 44	
Totals			\$38,857 61

CASH ACCOUNT.—Continued.

Expenditure in Ontario only for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

(Total Col. 4.)

Repaid to shareholders in reduction of stock \$13,585 30

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	1,227 13
26. (b) Commission or brokerage	752 13
28. (d) Stationery, postage, printing and advertising	95 76
29. (e) Law costs	693 59
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates, electric, water, gas..	3,964 63
32. (h) Registration fees	82 00

E.—Other Expenditure, viz.:

34. (a) Renewing elevator in York Chambers	3,140 00
35. (b) Repairs, etc., to buildings on Company's lands	2,538 50
36. (c) Insurance	826 66
(d) Rent of leasehold land	829 48
(e) Miscellaneous	183 96

F.—Balance.

37. (a) Cash on hand and in bank	10,878 47
Totals	\$38,857 61

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, none; on debentures, none; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty 5 to 6 per cent.
7. Of the mortgages held by the Corporation \$26,387.50 on realty situate in Ontario, \$173,032.22 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None in Ontario.
10. Aggregate market value of the land mortgaged to the Corporation. No recent valuation.
11. How often are the securities held by the Corporation valued. No regular time.
12. (a) What officers of the Corporation are under bond and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? 19th January, 1905, at Toronto Office.
14. Names and addresses of the auditors for 1904 and 1905. For 1904: D. S. Carson, C.A., Glasgow, Scotland; John Maughan, Toronto, Ont.; W. G. Nichols, Winnipeg, Man. For 1905: Not yet advised of appointment.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? None.
16. What is the date appointed for the Annual Meeting? 12th April, 1905.
17. Date of last Annual Meeting? 12th April, 1904.

THE TORONTO LAND AND INVESTMENT CORPORATION.

Head Office, Toronto.

Incorporated by Letters Patent of Ontario, (30th January, 1886), issued under the Ontario Joint Stock Companies Letters Patent Act (R.S.O. 1877, c. 150).

For the lending and borrowing powers see R.S.O. 1877, c. 150; R.S.O. 1887, c. 157; and Loan Corporations Act, R.S.O. 1897, c. 205.

ANNUAL STATEMENT

On the condition and affairs of the Toronto Land and Investment Corporation at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 21 Leader Lane, in the City of Toronto, in the Province of Ontario.

The Board is constituted of seven directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective term of office:

G. R. R. Cockburn, President, Toronto;	1st December, 1904;	1st December, 1905
Frederick Wyld, Vice-President, Toronto;	"	"
Hon. G. A. Cox, Director, Toronto;	"	"
Donald McKay, Director, Toronto;	"	"
J. Gordon Jones, Director, Toronto;	"	"
Robert Kilgour, Director, Toronto;	"	"
John Catto, Director, Toronto;	"	"
W. M. Wallace, Acting Manager, Toronto;	"	"

A.—Permanent capital stock; total amount authorized, \$500,000; total amount subscribed, \$400,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and Permanent capital stock created by virtue of Joint Stock Companies' Acts or Private Acts.

—	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
4. Fully called.....	8,000	\$ 50	\$ 400,000	\$ c. 231,543 50	\$ c. 168,456 50

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total subscribed, \$400,000.00; total paid thereon	\$231,543 50	
4. (d) Dividends declared in respect of (1), but not yet paid (un-claimed)	10 97	\$231,554 47

C.—Liabilities to Shareholders other than as already shown under A. or B

26. Suspense account (or Contingent Fund)	\$13,264 32	
Balance Profit and Loss Account	1,904 73	

Liabilities to the Public.

40. Other liabilities to the public, viz:—		
41. (a) Mortgages on real estate	\$13,500 00	
42. (b) Interest accrued in respect of (41)	67 50	13,567 50
Total liabilities		\$260,291 02

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property owned Beneficially by Corporation.

6. (b) Freehold land (including buildings) other than foregoing		\$199,548 00
--	--	--------------

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land ...	\$39,443 78	
11. (c) Interest due and accrued on item (9) and not included therein	164 37	39,608 15

E.—Cash.

31. (a) On hand		212 37
32. (b) In bank		20,322 50
Total assets		\$260,291 02

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

(Total Col. 4.)

2. (1) Cash (not already shown under (1)) :—		
(i) On hand		\$13,380 60

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—

10. (i) Principal		13,842 69
11. (ii) Interest		1,648 14

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales		9,336 37
17. Rents		6,172 00
Totals		\$44,379 00

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

B.—Expended on Stock Account.		(Col. 4.)
Repaid shareholders 5 per cent. of paid up stock		\$12,186 50
C.—Borrowed Money (other than foregoing) or interest thereon paid.		
Interest paid on mortgage, real estate		742 50
D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees		2,088 33
26. (b) Commission or brokerage		606 57
28. (d) Stationery, postage, printing and advertising		86 98
29. (e) Law costs		359 50
32. (h) Registration fees and Ontario tax		213 60
E.—Other Expenditure, viz.:		
34. (a) Interest on mortgages, insurance paid properties insured		394 75
(c) Taxes		4,861 04
(d) Repairs, etc., to properties owned		1,605 16
F.—Balance.		
37. (b) Cash on hand and in bank		21,134 87
Totals		\$44,279 80

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations on the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, none.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty 5 per cent.
7. Of the mortgages held by the Corporation all are on realty situate in Ontario.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$61,500.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) what officers of the Corporation are under bond and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? 30th November, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: William Kerr, Joseph Fletcher, Toronto, Ont. For 1905: William Kerr and Joseph Fletcher, Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? None.
16. What is the date appointed for the Annual Meeting? 10th January.
17. Date of last Annual Meeting? 10th January, 1905.

THE TORONTO SAVINGS AND LOAN COMPANY.

Head Office, Peterborough, Ontario.

Incorporated as "The Toronto Real Estate Investment Company," by Letters Patent of Ontario (June 15th, 1885, issued under the Ontario Joint Stock Companies' Letters Patent Act (R.S.O. 1877, c. 150). Supplemental Letters Patent of Ontario (29th December, 1877), were issued under R. S. O. 1887, c. 157, defining the borrowing powers, etc. Further Supplementary Letters Patent of Ontario (25th September, 1889), were issued under the last mentioned Act, increasing the capital stock from \$400,000 to \$2,000,000. Further Supplementary Letters Patent of Ontario (30th March, 1891), were issued under the same Act, conferring agency powers on the Company. The Corporate name was by Order-in-Council (2nd April, 1891), changed to "The Toronto Savings and Loan Company."

For the lending and borrowing powers, see the Letters Patent and the Acts R.S.O. 1877, c. 150; R.S.O. 1887, c. 157; R.S.O. 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Toronto Savings and Loan Company, of Peterborough, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 437 George street south, in the Town of Peterborough, in the Province of Ontario.

The Board is constituted of ten directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Hon Geo. A. Cox, President, Toronto, Ont., 22nd January, 1904; term of one year		
Richard Hall, Vice-President, Peterborough;	"	"
A. A. Cox, Vice-President, Peterborough;	"	"
Peter Hamilton, Director, Peterborough;	"	"
D. W. Dumble, Director, Peterborough;	"	"
James Stevenson, Director, Peterborough;	"	"
A. L. Davis, Director, Peterborough;	"	"
H. I. Le Fevre, Director, Lakefield,	"	"
H. C. Cox, Director, Toronto;	"	"
W. G. Morrow, Managing Director, Peterborough;	"	"
H. W. Morphet, Secretary, Peterborough,	"	"

A.—Permanent capital stock: Total amount authorized, \$2,000,000; total amount subscribed, \$1,000,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies' Acts or by Private Acts.

Last call made, date 31st May, 1902; Gross amount, \$400,000. Amount paid thereon, \$400,000.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid thereon.
		\$	\$	\$	\$
1. Fully called	10,000	100	1,000,000	1,000,000	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$1,000,000; total paid thereon	\$1,000,000 00	
4. (d) Dividends declared in respect of (1), but not yet paid	15,000 00	
6. (f) Reserve fund in respect of (1)	510,000 00	
7. (g) Contingent fund in respect of (1)	24,628 69	\$1,549,628 69

Liabilities to the Public.

27. Deposits payable on notice	\$278,776 84	
28. Interest on deposits, due or accrued or capitalised	4,399 34	
29. Debentures issued in Canada	377,489 87	
30. Interest due and accrued on (29)	7,415 86	
31. Debentures issued elsewhere than in Canada	90,592 37	
32. Interest accrued on (31)	496 50	
40. Other liabilities to the public, viz.:—		
41. (a) Sundry accounts due by Company	1,526 27	760,697 05
Total Liabilities		\$2,310,325 74

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property owned Beneficially by Corporation.

5. (b) Freehold land (including buildings) other than foregoing....	\$686,795 88	
6. (c) Leasehold land (including buildings) other than foregoing ..	35,000 00	\$721,795 88

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land....	\$31,411 16	
11. (c) Interest due and accrued on item (9)	160 45	31,571 61

C.—Debts not above enumerated for which the Corporation holds security as follows:

22. (j) Debts secured by stocks and bonds	\$1,510,687 22	
26. (n) Interest due or accrued on item (22) and not included therein	3,962 50	1,514,649 72

D.—Unsecured Debts.

27. (a) Sundry accounts due to Company	\$2,141 46	2,141 46
--	------------	----------

E.—Cash.

31. (a) On hand	1,553 28	
32. (b) In banks	38,613 79	40,167 07

Total assets		\$2,310,325 74
---------------------------	--	-----------------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

1. (b) Cash (not already shown under (1)) :—	(Col. 1.)	(Col. 4.)
2. (i) On hand		\$ 1,686 51
3. (ii) In bank		44,150 30

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:—		
10. (i) Principal	\$30,860 00	
11. (ii) Interest	4,506 25	35,366 25
(b) Stocks, bonds and debentures owned by Company:—		
12. (i) Principal	\$20,800 75	
13. (ii) Interest or divid's together with profits on stocks & bonds	101,831 54	122,632 29

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales (not included in any of the foregoing items)	\$36,285 03	
17. (b) Rents	47,314 45	83,599 48

F.—Borrowed Money.

26. (b) Borrowed by taking deposits		313,454 93
27. (c) Borrowed on debentures		123,162 36

G.—Receipts from other sources, viz.:

30. (a) Sundry accounts due to Company		4,753 92
--	--	----------

Totals		\$728,795 04
---------------------	--	---------------------

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		
1. (a) Loaned on mortgages of realty	(Col. 1.) (Total Col. 4.)	\$9,600 00
(b) Loaned or invested in other securities, viz.:—		
2. (i) On stocks, bonds and debentures		69,351 98
6. (c) Real estate purchased		88,165 33
B.—Expended on Stock Account.		
8. Dividends paid on permanent stock		60,000 00
C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:		
19. (b) Deposits: Principal, \$285,392.44; interest, \$8,513.05		293,905 49
20. (c) Debentures issued in Canada: Principal, \$114,584.23; interest, \$15,782.35		130,366 58
21. (d) Debentures issued elsewhere: Principal, \$243.33; interest, \$3,403.25		3,646 58
D.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	\$15,718 60	
26. (b) Commission and brokerage, etc.	946 30	
28. (d) Stationery, postage, printing and advertising	625 20	
29. (e) Law costs	160 06	
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	1,624 60	
		19,074 76
E.—Other Expenditure, viz.:		
33. (a) Taxes on property owned	\$1,934 51	
34. (b) Ground rent on leasehold property	1,250 00	
35. (c) Repairs and improvements on property owned	6,049 05	
36. (d) Insurance on property owned	2,967 82	
		12,201 38
(e) Sundry accounts due by Company		2,316 87
F.—Balance		
37. (a) Cash on hand and in banks		40,167 07
Totals		\$728,796 04

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905, \$79,660.00.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905, £750.
3. Amount of other existing obligations of the Corporation which will mature in 1905. Exclusive of deposits. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None except \$1,510,687.22 of cashable stocks and bonds.
5. Average rate of interest per annum paid by the Corporation during 1904. On deposits, 3½ per cent.; on debentures, 4 per cent.; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904. On mortgages of realty, 5 per cent.; on other securities— per cent.
7. Of mortgages held by the Corporation \$24,333.33 is on realty situate in Ontario and \$7,077.83 elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$87,000.
11. How often are the securities held by the Corporation valued? Within one year.
12. (a) What officers of the Corporation are under bond and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? To 31st December, 1904, running audit.
14. Names and addresses of auditors respectively for 1904 and 1905. For 1904: Jas. A. Hall, and W. S. Hodgins. For 1905: Jas. A. Hall and W. S. Hodgins.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January, 1904 and 2nd July, 1904. 6 per cent.
16. What is the date appointed for the Annual Meeting? 27th January, 1905.
17. Date of last Annual Meeting? 22nd January, 1904.

THE WALKERVILLE LAND AND BUILDING COMPANY, LIMITED.

Head Office, Walkerville, Ontario.

Incorporated by Letters Patent of Ontario (22nd October, 1890) issued under the Ontario Joint Stock Companies Letters Patent Act, R.S.O., 1887, c. 157.

For the lending and the borrowing powers see the above instrument and Act, also R.S.O., 1897, c. 205.

ANNUAL STATEMENT

Of the condition and affairs of the Walkerville Land and Building Company (Limited), Walkerville, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is on Sandwich street, in the Town of Walkerville, in the Province of Ontario.

The Board is constituted of five directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

E. Chandler Walker, President, Walkerville, Ont.; February, 1905; February, 1906
 F. H. Walker, Vice-President, Walkerville, Ont.; " "
 J. Harrington Walker, Director, Walkerville, Ont.; " "
 Wm. Aikman, jr., Director, Detroit, U.S.A.; " "
 Douglas F. Matthew, Director and Secretary, Walkerville, Ont.; "

A.—Permanent capital stock: Total amount authorized, \$1,000,000; total amount subscribed, \$1,000,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b).—Fixed and permanent capital stock created by virtue of Joint Stock Companies Acts or Private Acts.

Last call made: January 1st, 1891; rate per cent. 50 per cent; gross amount, \$500,000; amount paid thereon, \$500,000.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.
		\$	\$	\$
1. 50 per cent. called.....	10,000	100	1,000,000	500,000

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital, 50 per cent. called; total called, \$500,000; total paid thereon	\$500,000 00	
5. (e) Unappropriated profits in respect of (2)	73,129 91	\$573,129 91

Liabilities to the Public.

29. Debentures issued in Canada	\$200,000 00	
30. Interest accrued on (29)	4,750 00	
40. Other liabilities to public, viz:—		
41. (a) Accounts payable	2,741 27	207,491 27
Total		\$780,621 18

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the Corporation.

5. (b) Freehold land (including buildings) other than foregoing ..		\$678,887 27
--	--	--------------

C.—Debts not above enumerated.

22. (j) Debts secured by retaining titles, being amounts outstanding on sales and advances		73,693 86
--	--	-----------

E.—Cash.

31. (a) On hand	\$ 127 22	
32. (b) In banks	2,843 84	2,971 06

F.—Assets not hereinbefore Mentioned.

37. (a) Office and hotel furniture	\$1,297 94	
38. (b) Accounts and bills receivable	19,023 84	
39. (c) Rents accrued	3,609 74	
40. (d) Insurance premiums	1,137 47	25,068 99
Total assets		\$780,621 18

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balances from 31st December, 1903.

2. (b) Cash (not already shown under (1)) :—		
1. (i) On hand		\$1,122 43
3. (ii) In bank		

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rents	30,428 15
---------------------	-----------

G.—Receipts from other sources.

30. (a) From sales and contracts	8,569 89
(b) From interest	1,274 98
From accounts collected	13,900 20
Totals	\$55,295 65

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

6. (c) Real estate purchased and buildings erected	\$19,479 91
--	-------------

C.—Borrowed Money (other than foregoing) or interest thereon paid.

18. (a) Bank account: Interest	6 34
20. (c) Debentures issued in Canada: Interest	9,500 00
D.—Management Expenses (other than foregoing).	
25. (a) Salaries, secretary	1,350 00
30. (f) Fuel, water and light	1,677 73
33. (i) Office rent	300 00

E.—Other Expenditures, viz.:

34. (a) Government taxes and fees	410 00
35. (b) Municipal taxes	7,152 89
36. (c) Insurance	1,915 17
Expenses	1,507 06
Repairs and maintenance	9,025 49

F.—Balance.

37. (b) Cash on hand and in bank	2,971 06
Totals	\$55,295 65

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. \$7,491.27.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$15,000.00.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, none; on debentures, $4\frac{1}{2}$ per cent.; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, none; on other securities, 6 per cent.
7. Mortgages held by the Corporation. None.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of land mortgaged to the Corporation. None.
11. How often are the securities held by the Corporation valued? At directors' meeting.
12. (a) What officers of the Corporation are under bond and for what sum respectively? None.
13. When were the accounts of the Corporation last audited? 10th February, 1905.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed)? For 1904: Edward Radford and A. Reckie. For 1905: Edward Radford and A. Reckie.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? None.
16. What is the date appointed for the Annual Meeting? Second Tuesday in February each year.
17. Date of last Annual Meeting? 14th February, 1905.

IV. TRUSTS COMPANIES.

DETAILED REPORTS OF THE SEVERAL COMPANIES.

THE CANADA TRUST COMPANY.

Incorporated on the 23rd July, 1894, by special Act of the Dominion of Canada, 57-8 Vict. (1894) Chap. 115, under the name of The General Trusts Corporation of Canada.

By a subsequent special Act, 62-3 Vict., Chap. 111 (D) passed on the 11th August, 1899, the corporate name was changed to The Canada Trust Company, and certain other amendments were made in the incorporating Act.

The powers of the Company are defined by section 3 of the incorporating Act, which powers are (section 4) to be deemed subject to the law of the Province.

ANNUAL STATEMENT

Of the condition and affairs of the Canada Trust Company, of London, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 442 Richmond street, in the City of London, in the Province of Ontario.

The Board is constituted of nine directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Verchoyle Cronyn, President, London, Ont.,	February, 1904; February, 1905
John W. Little, Vice-President, London, Ont.;	" "
Walter Bell, Director, London, Ont.;	" "
F. E. Leonard, Director, London, Ont.;	" "
Philip MacKenzie, Director, London, Ont.;	" "
Col. W. M. Gartshore, Director, London, Ont.;	" "
T. H. Purdom, Director, London, Ont.;	" "
Prof. Wm. Saunders, Director, Ottawa;	" "
Geo. A. Somerville, Managing-Director, London, Ont.	" "

A.—Permanent capital stock: Total amount authorized, \$200,000; total amount subscribed, \$200,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and Permanent Capital Stock created by virtue of Joint Stock Companies Act or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid.
		\$	\$	\$	\$
Partly called	: 2,000	100	200,000	200,000	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders)

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital, fully called: Total called, \$200,000; total paid thereon	\$200,000 00	
5. (e) Unappropriated profits in respect of (1)	1,917 83	
6. (f) Reserve fund in respect of (1)	40,000 00	
		\$241,917 83

Liabilities to the Public—None.

Contingent Liabilities.

48. Money for which the Corporation is contingently liable, viz.:		
49. (a) Principal guaranteed	379,376 98	
50. (b) Interest guaranteed	6,431 53	
51. (c) Trust funds invested but not guaranteed:—		
52. (1) Principal	306,119 84	
53. (2) Interest	10,474 87	
54. (d) Trust funds uninvested not bearing interest and not guaranteed	NIL	
55. (e) Unrealized assets of estates, estimated	69,315 00	
Total contingent liabilities		770,718 2 ^a
Gross total liabilities, actual and contingent		\$1,012,636 06

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by mortgages of land.

9. (a) Debts (other than item 10) secured by mortgages of land, less retained to pay prior mortgages, \$3,250.56	\$178,328 44
--	--------------

C.—Debts not above enumerated for which the Corporation holds security as follows:

15. (c) Public school debentures owned by Company	\$2,532 00	
16. (d) Debts secured by loan corporations debentures	3,503 00	
22. (j) Debts secured by permanent stock of loan corporations	39,110 00	
23. (k) Debts secured by permanent stock of insurance company	1,429 00	
24. (l) Debts secured by life insurance policies	7,215 00	
		53,789 00

E.—Cash.

32. (b) In banks in Canada, London, Ont.	9,800 39
Total assets owned beneficially by Corporation	\$241,917 83

II.—Assets not owned beneficially by Corporation, but for which the Corporation is accountable.

A.—As Guarantor.

(a) Mortgage securities:		
47. (i) Principal	\$306,036 56	
44. (ii) Interest	9,037 63	
(b) Other securities:		
45. (i) Principal	68,779 50	
46. (ii) Interest due and accrued	895 50	
(iii) Cash in bank	1,069 32	

B.—As Trustee, Representative, Guardian or Agent (without guarantee).

(a) Mortgage securities:		
47. (i) Principal	206,701 66	
48. (ii) Interest due and accrued	4,825 16	
(b) Other securities:		
49. (i) Principal	90,232 22	
50. (ii) Interest due and accrued	1,449 78	
51. (c) Unrealized assets of estates, estimated	69,315 00	
52. (d) Trust funds deposited in banks bearing interest but not guaranteed	12,385 90	

Total of Assets II 770,718 22

Grand total of Assets I. and II. \$1,012,636 06

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

3. (b) Cash not already shown under (1):		
(i) In bank		\$1,225 71

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty:		
10. (i) Principal	\$32,022 63	
11. (ii) Interest	7,979 58	
(b) On other securities:		
12. (i) Principal	55,612 09	
13. (ii) Interest or dividends	2,399 01	
(c) Unsecured debts:		
4. (i) Retained to pay prior mortgages	2,242 55	
		100,255 86

D.—Receipts from Real Estate Owned Beneficially by Corporation.

17. (b) Rents	30 25	30 25
---------------------	-------	-------

E.—Miscellaneous.

18. (a) Commission, brokerage (or remuneration as corporate agent, trustee, etc.)		3,023 63
Totals		\$109,540 65

II.—Received as Corporate Trustee, Representative, Guardian or Agents in Trust.

A.—Balance from 31st December, 1903.

33. (ii) In bank	\$223 77	\$223 77
------------------------	----------	----------

B.—Receipts on account of investments, etc.

34. (a) Mortgages: Principal, \$68,150.64; Interest, \$18,445.19	86,595 83	
35. (b) On other securities: Principal, \$71,022.33; Interest, \$10,528.68..	81,551 01	
		168,146 84

C.—Receipts from Real Estate.

38. (b) Rents	2,519 94	2,519 94
---------------------	----------	----------

D.—Receipts from other sources.

39. Estates moneys received for investments, etc.	291,115 25	291,115 25
Totals		\$462,005 80

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

(Col. 1.)

A.—Sums Loaned or Invested on Capital Account.

1. (a) Loaned on mortgages of realty, \$35,728.12; assumed, \$2,288.21..	\$38,016 33	
(b) Loaned on other securities:		
2. (i) Call loans on stock, bonds, etc.	56,158 70	
3. (ii) Life insurance policies	2,000 00	
		\$96,175 03

D.—Management Expenses.

25. (a) Salaries, wages and fees	750 00	
26. (b) Commission or brokerage	1,262 34	
28. (d) Stationery, postage, printing, and advertising	949 06	
29. (e) Law costs	131 67	
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	67 16	
32. (h) Registration fees	405 00	
		3,565 23

F.—Balance.

37. (a) Cash in banks in Canada		9,800 39
Totals		\$109,540 65

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

II.—Expended on Trust or Agency Account.

A.—Loaned or Invested on Capital Account..

42. (a) Loaned on mortgages of realty	\$190,938 26	
(b) Loaned or invested on or in other securities:		
(i) Debentures of other corporations	20,000 00	\$210,938 26

B.—Other Expenditure.

53. (d) Sundry returns, payments and distributions	237,622 32	237,622 72
--	------------	------------

C.—Balance.

54. (b) Cash in banks in Canada	13,445 22	13,445 22
Totals		\$462,005 80

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. None.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$14,701.50.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, nil per cent.; on debentures, nil per cent.; on debenture stock, nil.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty 5.0745 per cent.; on other securities, 5.2827 per cent.
7. Of the mortgages held by the Corporation \$704,929.44 is on realty situate in Ontario, and none elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings were taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$1,342,365.00.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Managing Director, \$10,000; and other officers, \$56,000; \$66,000 in all. By Guarantee Company.
13. When were the accounts of the Corporation last audited? As at 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed). For 1904: Geo. F. Jewell, F.C.A., and A. A. Booker, London, Ont. For 1905: Geo. F. Jewell, F.C.A., and A. A. Booker, London, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? None.
16. What is the date appointed for the Annual Meeting? February, 1906.
17. Date of last Annual Meeting? 27th February, 1905.

THE IMPERIAL TRUSTS COMPANY.

Head Office, Toronto, Ontario.

Incorporated on the 23rd day of June, 1887, by Special Act of the Dominion of Canada, 50-51 Vic. c. 115 (D), which in 1890 was amended by 53 Vic. c. 101 (D).

ANNUAL STATEMENT

Of the condition and affairs of The Imperial Trusts Company, of Canada, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 32 Church Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of six directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

George H. Gooderham, President, Toronto,	1st March, 1904,	1st March, 1905
James H. Mitchell, Vice-President, Toronto,	"	"
Thomas Walmsley, Director, Toronto,	"	"
Arthur Jackson, Director, Toronto,	"	"
John D. Chipman, Director, St. Stephen, N.B.,	"	"
Henry M. Pellatt, Director, Toronto,	"	"
Shirley Stewart, Manager, Toronto.		

A.—Permanent capital stock: Total amount authorized, \$500,000; total amount subscribed, \$400,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies Acts or Private Acts.

Last call made date 30th June, 1904; Rate per cent. 15 per cent. on 302 shares; Gross amount, \$4,530; Amount paid, \$1,379.40.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid.
		\$	\$	\$ c.	c.
2. 25 per cent. called.....	4,000	100	400,000	96,674 40	303,325 60

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.
(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital 25 per cent. called: Total called, \$100,000; total paid thereon	\$96,674 40
4. (d) Dividends declared in respect of (2)	4,345 65
5. (e) Unappropriated profits in respect of (2)	7,333 84
6. (f) Reserve fund in respect of (2)	20,000 00
Total actual liabilities	\$128,353 89

Liabilities to the Public—None.

Contingent Liabilities.

48. Money for which the Corporation is contingently liable:

49. (a) Trust funds received for investment, including interest to 31st December, 1904, \$354,502.74.

Total contingent liabilities	354,502 74
Gross total liabilities (actual and contingent)	\$482,856 63

BALANCE SHEET AS AT 31ST DECEMBER, 1904.—Continued.

Li.	Assets.		
I.—Assets of which the Corporation is the Beneficial Owner.			
B.—Debts secured by mortgages of land.			
10. (b) Debts secured by mortgaged land held for sale	\$11,983 60	\$11,983 60	
C.—Debts not above enumerated for which the Corporation holds securities as follows:			
22. (j) Debts secured by shares in Canadian corporations	99,075 38		
25. (m) Debts secured by first mortgage bonds	7,600 00		
		106,675 38	
D.—Unsecured Debts.			
27. (a) Accrued commission	250 00		
28. (b) Shares of capital stock	800 00		
		1,050 00	
E.—Cash.			
31. (a) On hand	2,982 23		
32. (b) In banks	5,662 68		
		8,644 91	
Total assets owned beneficially by Corporation		\$128,353 89	
II.—Assets not owned beneficially by Corporation but for which the Corporation is accountable.			
A.—As Guarantor.			
(a) Mortgage securities	800 00		
45. (b) Other securities:			
(i) Call loans	37,475 62		
Shares Hudson's Bay Co.	62,962 50		
Shares in Canadian corporations	181,187 18		
B.—As Trustee, Representative, Guardian or Agent (without guarantee).			
(a) Mortgage securities:			
47. (i) Principal	70,199 60		
52. (d) Uninvested trust funds: Cash in banks	1,702 84		
Sundries	175 00		
		354,502 74	
Gross total of assets I. and II.		\$482,856 63	

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.			
A.—Balances from 31st December, 1903.			
(b) Cash:	(Col. 3.)	(Col. 4.)	
(i) On hand		\$29 80	
(ii) In bank		1,475 95	
B.—Sums Received Wholly or Partly on Capital Stock.			
4. (a) Calls on joint stock permanent capital		1,379 40	
C.—Receipts on Account of Investments, Loans or Debts.			
(b) On other securities:			
12. (i) Principal		16,424 22	
13. (ii) Interest or dividends		7,567 98	
E.—Miscellaneous.			
18. Commission, brokerage (or remuneration as Corporation Agent, Trustee, etc.)..		18,928 31	
Totals		\$46,805 66	
II.—Received as Corporate Trustee, Representative, Guardian or Agent in Trust.			
A.—Balance from 31st December, 1903.			
31. (b) Cash:			
(i) On hand	\$3,514 00		
B.—Received on Account of Investments, Loans or Debts during the year.			
36. (b) On other securities: Principal and interest	102,494 79		
D.—Receipts from other sources, viz.:			
39. (a) Advance from Corporation Account	1,529 68		
40. (b) Received for credit of trust accounts during the year	383,547 71		
Totals		\$491,086 18	

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.			
A.—Sums Loaned or Invested on Capital Account.			
(b) Loaned or Invested in other securities:	(Col. 1.)	(Total Col. 4.)	
2. (i) Shares in Canadian corporations		\$15,218	%
3. (ii) First mortgage coupon bonds		7,800	00
4. (iii) Advance on Trust account		1,529	68
B.—Expended on Stock Account.			
8. Dividends paid on permanent stock	\$2,388	00	2,388 00
D.—Management Expenses (other than foregoing).			
25. (a) Salaries, wages and fees	2,199	50	
26. (b) Commission or brokerage		5	00
28. (d) Stationery, postage, printing, and advertising		284	37
29. (e) Law costs		167	37
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates		705	87
32. (h) Registration fees		67	00
Ontario tax		250	00
33. (i) Other management expenditure and auditors' fees	6,556	00	
			10,224 11
F.—Balance.			
37. (a) Cash on hand	2,982	23	
(b) Cash in bank	5,662	68	8,644 91
Totals			\$45,805 66
II.—Expended on Trust or Agency Account.			
A.—Loaned or Invested on Capital Account.			
42. (a) Loaned on mortgages of realty	70,999	60	
(b) Loaned or invested on, or in other securities, viz.:			
43. (i) Hudson Bay Company shares	62,962	50	
44. (ii) On Canadian corporations' shares	99,686	97	
45. (iii) Call loans	21,975	62	
B.—Other Expenditure.			
53. (d) Repayment of trust funds	233,758	65	
C.—Balance.			
54. (b) Cash in banks	1,702	84	
Totals			\$491,086 18

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

- Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
- Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
- Amount of other existing obligations of the Corporation which will mature in 1905. None.
- Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. None.
- Average rate of interest per annum received by the Corporation during 1904, mortgages of realty 5 per cent.
- Of the mortgages held by the Corporation, \$12,783.60 is on realty situate in Ontario.
- Loans written off or transferred to real estate account during 1904. None.
- Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
- Aggregate market value of the lands mortgaged to the Corporation, \$21,000.
- How often are the securities held by the Corporation valued? Yearly at least.
- (a) What officers of the Corporation are under bond and for what sum respectively? None.
- When were the accounts of the Corporation last audited? December 31st, 1904.
- Names and addresses of the auditors for 1904 and 1905 (if appointed)? For 1904: Clarkson and Cross, Toronto. For 1905: W. H. Cross and D. H. Lockhart Gordon, Toronto.
- What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 1st July, 1904, 2½ per cent. 3rd January, 1905, 4½ per cent.
- What is the date appointed for the Annual Meeting? 2nd Tuesday in February in each year.
- Date of last Annual Meeting? 19th March, 1904.

THE LONDON AND WESTERN TRUSTS COMPANY, LIMITED.

Head Office, London, Ontario.

Incorporated on the 17th September, 1896, by Letters Patent of Ontario, issued under the Ontario Joint Stock Companies' Letters Patent Act, R.S.O., 1887, chapter 157. See also R.S.O., 1897, chapters 205-206.

ANNUAL STATEMENT

Of the condition and affairs of the London and Western Trusts Company, Limited, of London, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 405 Richmond street, in the City of London, in the Province of Ontario.

The Board is constituted of twenty-five directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

G. C. Gibbons, K.C., President, London, Ont.;	18th Feb., 1904; 16th Feb., 1905
John Labatt, Vice-President, London, Ont.;	" "
J. L. Englehart, Director, Petrolea, Ont.;	" "
John McClary, Director, London, Ont.;	" "
Geo. Robinson, Director, London, Ont.;	" "
T. H. Smallman, Director, London, Ont.;	" "
T. G. Meredith, K.C., Director, London, Ont.;	" "
R. Fox, Director, London, Ont.;	" "
M. D. Fraser, Director, London, Ont.;	" "
G. B. Harris, Director, London, Ont.;	" "
R. W. Puddicombe, Director, London, Ont.;	" "
W. H. Bowlby, K.C., Berlin, Ont.;	" "
John McLean, St. Thomas, Ont.;	" "
M. Masuret, Director, London, Ont.;	" "
Col. T. R. Atkinson, Director, Simcoe, Ont.;	" "
J. H. Nellis, Director, Woodstock, Ont.;	" "
D. Milne, Director, Sarnia, Ont.	" "
John Curry, Director, Windsor, Ont.	" "
Maj. Thomas Beattie, Director, London, Ont.;	" "
H. E. Gates, Director, London, Ont.	" "
J. C. Duffield, Director, London, Ont.;	" "
Judge Holt, Director, Goderich, Ont.;	" "
William Ball, Director, Chatham, Ont.;	" "
G. G. McPherson, Director, Stratford, Ont.;	30th May, 1904; "
W. J. Reid, Director, London, Ont.;	18th Feb., 1904; 16th Feb., 1905
John S. Moore, Manager, London, Ont.	

A.—Permanent capital stock: Total amount authorized, \$500,000; total amount subscribed, \$500,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies' Act or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.
		\$	\$	\$ c.
2. 20 per cent. called.....	5,000	100	500,000	100.00 00
Paid in advance of calls				39,134 84
	5,000	100	500,000	139,134 84

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital, 20 per cent. called, \$100, 000;		
total paid thereon	\$100,000 00	
(cc) Joint stock capital paid in advance of calls	39,134 34	
4. (d) Dividends declared in respect of (2), but not yet paid	3,373 88	
5. (e) Unappropriated profits in respect of (2)	3,357 64	
6. (f) Reserve fund in respect of (2)	25,000 00	
		\$170,865 86

Liabilities to the Public.—None.

Total actual liabilities	\$170,865 86
--------------------------------	--------------

Contingent Liabilities.

44. Claims against Corporation not acknowledged as debts:—		
45. (a) Original assets of estates (estimated value)	\$810,228 47	
46. Money for which the Corporation is contingently liable, viz.:—		
49. (a) Principal guaranteed	55,989 96	
50. (b) Interest guaranteed	750 12	
51. (c) Trust funds invested, but not guaranteed:—		
52. (i) Principal	519,440 09	
53. (ii) Interest	13,254 47	
54. (d) Trust fund uninvested, bearing interest and not guaranteed ..	29,221 51	
Total contingent liabilities		1,422,884 62
Gross total liabilities, actual and contingent		\$1,599,750 48

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

7. (d) Office fittings, etc.	\$1,000 00	\$1,000 00
B.—Debts secured by Mortgages of Land.		
9. (a) Debts secured by mortgages of land	142,576 34	
11. (c) Interest due or accrued on item (9) and not included therein ..	4,647 24	
		147,223 58

C.—Debts not above enumerated for which the Corporation holds securities as follows:

22. (j) Debts secured by Loan Company's stocks	\$11,736 50	
23. (k) Debts secured by legacies and life insurance policies	6,600 09	
26. (n) Interest due and accrued on items 22, 23, and not included therein	380 18	
		18,716 77

E.—Cash.

32. (b) In bank	3,925 51	
Total of assets owned beneficially by Corporation		\$170,865 86

II.—Assets not Owned Beneficially by Corporation but for which the Corporation is Accountable.

A.—As Guarantor.

(a) Mortgage securities:—		
43. (i) Principal	\$54,253 87	
44. (ii) Interest due and accrued	1,557 06	
(b) On other securities:—		
45. (i) Principal	1,348 01	
46. (ii) Interest due and accrued	15 57	

B.—As Trustee, Representative, Guardian or Agent (without guarantee).

(a) Mortgage securities:—		
47. (i) Principal	504,828 17	
48. (ii) Interest due or accrued	12,165 67	
(b) Other securities:—		
49. (i) Principal	15,000 00	
50. (ii) Interest due and accrued	266 29	
51. (c) Original assets of estates (estimated value)	810,228 47	
52. (d) Uninvested trust funds	29,221 51	

Total of assets II	1,422,884 62
--------------------------	--------------

Gross total of assets I and II	\$1,599,750 48
--------------------------------------	----------------

*By resolution of Board of Directors. Received at par.

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.		
A.—Balance from 31st December, 1903.		
	(Col. 1.)	(Total Col. 4.)
3. (ii) Cash in bank		\$15,968 43
B.—Sums received wholly or partly on Capital Stock.		
(aa) Joint stock capital received in advance of calls		14,590 09
C.—Receipts on account of Investments, Loans or Debts.		
(a) On mortgages of realty:—		
10. (i) Principal		8,266 26
11. (ii) Interest	\$5,751 17	5,751 17
(b) On other securities:—		
(i) Principal		17,900 02
(ii) Interest	739 21	739 21
E.—Miscellaneous.		
18. (a) Commission, brokerage (or remuneration as corporate agent, trustee, etc.)	10,723 53	10,723 53
G.—Receipts from other sources.		
30. (a) Safe deposit rentals	278 25	278 25
Totals		\$74,216 96
II.—Received as Corporate Trustee, Representative, Guardian or Agent in Trust.		
A.—Balances from 31st December, 1903.		
33. (ii) In banks	\$32,520 04	
B.—Received on account of Investments, Loans or Debts.		
34. (a) On mortgages: Principal, \$126,458.35; interest, \$21,991.93	148,450 28	
35. (b) On other securities: Principal, \$455,464.36; interest, \$34,988.82	490,453 18	
36. (c) On unsecured debts: Principal, \$20,656.31; interest, \$965.95	21,622 26	
C.—Receipts from Real Estate.		
37. (a) Sales (not included in foregoing items)	66,037 51	
38. (b) Rents	4,254 61	
D.—Receipts from other sources, viz.:		
39. (a) Cash in banks, etc.	150,993 55	
40. (b) Sundry realisations	71,858 34	
Totals		\$976,169 77

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.		
A.—Sums Loaned or Invested on Capital Account.		
	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty		\$41,870 57
2. (b) Loaned or invested in other securities:—		
(i) Life insurance policies		2,866 15
(ii) Loan Company's debentures and stocks		4,236 52
(iii) Loan Company's deposit		10,000 00
B.—Expended on Stock Account.		
8. Dividends paid on permanent stock	\$5,634 86	5,634 86
C.—Management Expenses (other than foregoing).		
25. (a) Salaries, wages and fees	3,100 16	
26. (b) Commission or brokerage	386 45	
28. (d) Stationery, postage, printing and advertising	946 76	
30. (f) Fuel, rent, taxes	619 94	
31. (g) Travelling expenses	22 95	
32. (n) Registration fees	100 00	
33. (i) Other management expenditure	192 09	
E.—Other Expenditures, viz.:		
34. (a) Government tax	315 00	
F.—Balance.		
(b) Cash in bank, London, Ont.		3,925 51
Totals		\$74,216 96

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.—Continued.

II.—Expended on Trust or Agency Account.

A.—Loaned or Invested on Capital Account.

	Total (Col. 4.)
42. (a) Loaned on mortgages of realty	\$305,767 30
(b) Loaned or invested on or in other securities:—	
43. (i) Loan Company's debentures	15,147 94
(b) Incumbrances on realty paid off, viz:—	
48. (i) Principal	50,847 51
49. (ii) Interest	1,684 96

B.—Other Expenditures.

50. (a) Commission or remuneration paid for management of estate, trust or agency	10,936 08
51. (b) Rents, taxes and rates	4,252 11
52. (c) Debts or obligations wholly or partly paid: Principal,; interest,....	127,672 56
53. (d) Allowances and advances to beneficiaries of estates	118,451 99
(e) Encumbrances on stocks: Principal, \$190,189.40; interest, \$10,673.57.....	200,862 97
(f) Sundry disbursements (including transfers to credit of Elgin Loan Co.)..	110,344 84

C.—Balance.

54. (b) Cash in bank	29,221 51
Total	\$975,189 77

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. \$10,226.00.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$21,582.36.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, none; on debentures, none.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 5.280 per cent.; on other securities, 5.134 per cent.
7. Of the mortgages held by the Corporation, \$147,223.50 is on realty situate in Ontario, and nothing elsewhere.
8. Loans written off or transferred to real estate account during 1904, none.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904, none.
10. Aggregate market value of the land mortgaged to the Corporation, \$297,975.00.
11. How often are the securities held by the Corporation valued? Annually.
12. (a) What officers of the Corporation are under bond and for what sum respectively? Manager, \$10,000; three other officers, \$4,000.00. By Guarantee Company.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed)? For 1904: Geo. F. Jewell, F.C.A., and A. A. Booker, London, Ont. For 1905: Geo. F. Jewell, F.C.A., and A. A. Booker, London, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January, 1904. Dividend 4 per cent. per annum. 2nd July, 1904. Dividend, 5 per cent. per annum.
16. What is the date appointed for the Annual Meeting? Third Thursday in February.
17. Date of last Annual Meeting? 16th February, 1905.

THE NATIONAL TRUSTS COMPANY, LIMITED.

Head Office, Toronto.

Incorporated on the 12th day of August, 1898, by Letters Patent issued under the Ontario Companies' Act (R.S.O. 1887, c. 191), subject to the provisions of the Ontario Trust Companies' Act (R.S.O. 1897, c. 206). See the Loan Corporations Act (R.S.O. 1897, c. 205.)

ANNUAL STATEMENT

Of the condition and affairs of the National Trusts Company, Limited, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the corporation is at No. 22 King Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of twenty-two directors holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

J. W. Flavelle, President, Toronto, Ont.;	27th January, 1905; 26th January, 1906
Z. A. Lash, K. C., Vice-President, Ont.;	" "
E. R. Wood, Vice-President, Toronto, Ont.;	" "
Hon. George A. Cox, Director, Toronto, Ont.;	" "
Hon. Mr. Justice Britton, Director, Toronto, Ont.;	" "
Hon. Mr. Justice MacMahon, Director, Toronto, Ont.;	" "
E. W. Cox, Director, Deer Park, Ont.;	" "
Elias Rogers, Director, Toronto, Ont.;	" "
Robert Kilgour, Director, Toronto, Ont.;	" "
H. H. Fudger, Director, Toronto, Ont.;	" "
A. E. Kemp, M.P., Director, Toronto, Ont.;	" "
F. W. Gates, Director, Hamilton, Ont.	" "
Wm. MacKenzie, Director, Toronto, Ont.;	" "
H. B. Walker, Director, New York City;	" "
Chester D. Massey, Director, Toronto, Ont.;	" "
G. H. Watson, K. C., Director, Toronto, Ont.;	" "
J. H. Plummer, Director, Sydney, C.B.;	" "
James Crathern, Director, Montreal, Que.;	" "
H. S. Holt, Director, Montreal, Que.;	" "
H. Markland Molson, Director, Montreal, Que.;	" "
Alex. Bruce, K.C., Director, Hamilton, Ont.;	" "
W. T. White, Managing Director, Toronto, Ont.	

A.—Permanent capital stock: Total amount authorized, \$2,000,000; total amount subscribed, \$1,000,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies Acts or Private Acts.

Description.	No. of shares.	Par value.	Total amount held.	Total paid thereon.	Total remaining unpaid.
		\$	\$	\$	\$
Fully called.....	10,000	100	1,000,000	1,000,000	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital; total called, \$1,000,000; total paid thereon	\$1,000,000 00	
4. (d) Dividends declared in respect of (1), but not yet paid	15,000 00	
5. (c) Unappropriated profits on (1)	4,424 02	
6. (f) Reserve fund in respect of (1)	350,000 00	
		\$1,369,424 02

Liabilities to the Public.

39. Due on loans in process of completion or to pay assumed mortgages	\$20,728 27	20,728 27
Total actual liabilities		\$1,390,152 29

Contingent Liabilities.

48. Money for which the Corporation is contingently liable, viz.:—		
49. (a) Principal guaranteed, together with trust deposits	\$2,789,992 99	
51. (e) Trust funds invested but not guaranteed:—		
52. (i) Principal	1,637,187 39	
54. (d) Trust funds uninvested not bearing interest and not guaranteed	1,996,205 87	
Total contingent liabilities		6,423,386 25
Gross total liabilities, actual and contingent		\$7,813,538 54

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by the Corporation.

1. (a) Office premises situate at Toronto, held in freehold	\$126,199 67	
(ii) Office premises situate at Winnipeg, held in freehold	76,943 40	
4. (iii) Office premises situate at Montreal, held in freehold	100,000 00	
5. (b) Freehold land, including buildings	9,304 78	
7. (d) Safe deposit vaults, Toronto and Winnipeg	28,534 00	
8. (e) Rents due and accrued	1,511 05	
		\$342,492 90

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land ..	\$203,750 21	
11. (c) Interest due or accrued on item (9) and not included therein ..	79,683 68	
		283,433 89

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Debts secured by municipal bonds and debentures	\$59,527 55	
15. (c) Debts secured by public school debentures	40,063 90	
22. (j) Debts secured by call loans on stocks, bonds, etc., and accrued interest	175,148 70	
23. (k) Stocks of other corporations	237,347 50	
24. (l) Railway and other bonds and accrued interest	136,080 42	
		648,168 07

E.—Cash.

31. (a) On hand	\$16,360 30	
32. (b) In sundry banks	99,707 13	
		116,067 43

Total assets owned beneficially by the Corporation	\$1,390,152 29
--	----------------

II.—Assets not Owned Beneficially by Corporation but for which the Corporation is Accountable.

A.—As Guarantors.

(a) Mortgage securities:—		
43. (i) Principal	\$2,014,403 38	
(b) On other securities:—		
4b. (i) Principal	509,623 69	

B.—As Trustee, Representative, Guardian or Agent (without guarantee).

(a) Mortgage securities:—		
47. (i) Principal	\$18,029 06	
(b) On other securities:—		
49. (i) Principal	\$17,885 91	
52. (d) Uninvested trust funds	2,163,444 21	

Total of assets II	6,423,386 25
--------------------------	--------------

Gross total of assets I and II	\$7,813,538 54
--------------------------------------	----------------

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance from 31st December, 1903.

	(Col. 1.)	(Total Col. 4.)
1. (b) Cash (not already shown under (i)) :—		
2. (i) On hand		\$42,224 05
3. (ii) In bank		143,219 52

C.—Receipts on account of Investments, Loans or Debts.

16. (a) On mortgages of realty :—		
11. (i) Principal		737,383 24
11. (ii) Interest	\$123,473 82	
12. (b) On other securities :—		
12. (i) Principal		335,370 87
13. (ii) Interest or dividends	22,417 32	

D.—Receipts from Real Estate Owned Beneficially by Corporation.

16. (a) Sales		13,675 03
17. (b) Rent	32,215 23	

E.—Miscellaneous.

18. (a) Commission, brokerage (or remuneration as Corporate Agent, Trustee, etc.)	78,111 53	
		256,217 90

F.—Borrowed Money.

25. (a) Bank or other advances, discounts or overdrafts		106,506 80
---	--	------------

Totals \$1,634,597 41

II.—Received as Corporate Trustee, Representative, Guardian or Agent in Trust.

A.—Balance from 31st December, 1903.

33. (b) Cash :—		
32. (ii) In bank		
32. (i) On hand	\$1,378,729 73	

B.—Received on account of Investments, Loans or Debts.

34. (a) On mortgages: Principal, \$598,979.38; interest, \$45,154.25	644,133 63	
35. (b) On other securities: Principal, \$376,976.83; interest, \$39,829.37	416,806 20	

C.—Receipts from Real Estate.

37. (a) Sales (not included in foregoing items)	46,350 83	
---	-----------	--

D.—Receipts from other sources.

39. (a) Estates, capital and revenue (including guarantee funds)	12,542,978 93	
		15,028,999 32

Totals \$16,663,596 73

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty		\$721,557 65
2. (b) Loaned or invested in other securities :—		
6. (i) Call loans, bonds, stocks, etc.		474,509 25
6. (c) Real estate purchased		8,851 27
7. (d) Incumbrances on realty paid off		16,969 05
7. (e) Insurance or taxes advanced on property mortgaged to the Corporation		6,964 41

B.—Expended on Stock Account.

8. Dividend paid on permanent stock	\$60,000 00	
-------------------------------------	-------------	--

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

18. (a) Bank account (principal and interest)		106,506 80
---	--	------------

D.—Management Expenses.

25. (a) Salaries, wages and fees	53,056 92	
26. (b) Commission or brokerage	8,133 46	
28. (d) Stationery, postage, printing, etc.	11,988 15	
29. (e) Law costs	2,300 04	
30. (f) Fuel, rent, taxes (other than 7 and 32) and rates	3,589 24	
31. (g) Travelling expenses	864 90	
32. (h) Registration fees	317 00	
33. (i) Other management expenditure	14,168 48	

E.—Other Expenditures.

33. Real estate charges	28,263 46	
		183,281 65

F.—Balance.

37. (a) Cash on hand and in banks		115,957 43
-----------------------------------	--	------------

Totals carried forward \$1,634,597 41

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.—Continued.

Brought forward		\$1,634,597 41
II.—Expended on Trust or Agency Account.		
A.—Loaned or Invested on Capital Account.		
42. (a) Loaned on mortgages of realty	\$787,060 48	
Loaned or invested on or in other securities:—		
43. (i) Call loans, bonds, etc.	777,823 24	
B.—Other Expenditure.		
53. (d) Estates, capital	11,302,729 58	
F.—Balance.		
54. (a) On hand and in banks	2,161,386 02	
		15,028,999 32
Totals		\$16,663,596 73

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

3. Amount of other existing obligations of the Corporation which will mature in 1905. \$191,929.72.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$39,718.65.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, $3\frac{1}{4}$ per cent.; on debentures, nil; on debenture stock, nil.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 7 per cent.; on their securities, 5 per cent.
7. Of the mortgages held by the Corporation \$277,439.86 is on realty situate in Ontario, and \$2,758,742.65 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904, \$2,484.62.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$6,000,000.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? All officers of the Company for a total of \$66,500.00. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905. For 1904: John MacKay and George Edwards, F.C.A., Toronto; John Aird, Winnipeg; G. Durnford, C.A., Montreal. For 1905: Same as for 1904.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 1st April, July, October and January. $1\frac{1}{4}$ per cent. on each day.
16. What is the date appointed for the Annual Meeting? None.
17. Date of last Annual Meeting? 27th January, 1904.

THE TRUSTS AND GUARANTEE COMPANY, LIMITED.

Head Office, Toronto, Ontario.

Incorporated on the 24th February, 1897, by Letters Patent of Ontario issued under R.S.O., 1897, c. 191. See Ontario Trusts Company Act (R.S.O. 1897, c. 206) and the Loan Corporations Act (R.S.O. 1897, c. 205).

ANNUAL STATEMENT

Of the condition and affairs of The Trusts and Guarantee Company, limited, of Toronto, Ont., at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 14 King street west, in the City of Toronto, in the Province of Ontario.

The Board is constituted of twelve directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

Hon. J. R. Stratton, President, Peterboro;	27th January, 1904;	25th January, 1905
C. Kloefer, Vice-President, Guelph;	"	"
D. W. Karn, Vice-President, Woodstock;	"	"
Wm. M. Graham, M.P., Director, Welland;	"	"
Peter Hamilton, Director, Peterboro;	"	"
F. M. Holland, Director, Toronto;	"	"
Hon. Senator McMillan, Director, Alexandria;	"	"
A. F. McLaren, M.P., Director, Stratford;	"	"
W. J. Sheppard, Director, Waubauskene;	"	"
R. R. McLennan, Director, Cornwall;	"	"
J. D. Reid, M.P., Director, Prescott;	"	"
T. P. Coffee, Managing-Director, Toronto;		

A.—Permanent capital stock: Total amount authorized, \$2,000,000; total amount subscribed, \$2,000,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies' Act or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid.
		\$	\$	\$	\$ c.
1. Fully called	14,059	50	702,950	702,950 00	.....
2. Partly paid	25,941	50	1,297,050	301,215 81	995,834 69
Totals	40,000	.....	2,000,000	1,004,165 81	995,834 69

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called; total called, \$702,950; total paid thereon	\$702,950 00	
2. (b) Ordinary joint stock capital, 20 per cent. called; total, \$1,460,500; total paid thereon	301,215 31	
4. (d) Dividends declared in respect of (1), (2), but not paid	22,956 22	
5. (e) Unappropriated profits in respect of (1), (2)	100,313 59	\$1,127,435 12

Liabilities to the Public.

27. Deposits payable on notice	\$71,025 99	
28. Interest on deposits due or accrued or capitalized	2,438 62	73,464 61
Total actual liabilities		\$1,200,899 73

Contingent Liabilities.

48. Moneys for which the Corporation is contingently liable, viz.:—		
49. (a) Principal guaranteed	\$15,000 00	
51. (c) Trust funds invested but not guaranteed:—		
52. Principal	574,201 90	
54. (d) Trust funds uninvested not bearing interest and not guaranteed	24,835 89	614,037 79
Grand total liabilities, actual and contingent		\$1,814,937 52

Cr. Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

B.—Debts secured by Mortgages of Land.

9. (a) Debts (other than item 10) secured by mortgages of land	\$457,911 96	
11. (c) Interest due and accrued on item (9) and not included therein	7,678 69	\$465,590 65

C.—Debts not above enumerated for which the Corporation holds securities as follows:

14. (b) Debts secured by municipal bonds or debentures	\$41,006 45	
15. (c) Debts secured by public school debentures	500 00	
16. (d) Debts secured by Loan Corporation debentures	91,273 23	
18. (f) Debts secured by stock or bonds (Provincial)	800 00	
20. (h) Debts secured only by permanent stock or shares of the Corporation	69,925 00	
22. (j) Debts secured by industrial stocks and bonds	253,125 81	
23. (k) Debts secured by bank and insurance Co.'s stocks and bonds	30,300 98	
24. (l) Debts secured by railway Co.'s stocks and bonds	78,444 21	
25. (m) Debts secured by life insurance policies, legacies and loans in process of completion	7,693 00	
26. (n) Interest due and accrued on items 14 to 25	7,065 25	580,834 93

D.—Unsecured Debts.

27. (a) Open accounts		3,281 30
-----------------------------	--	----------

E.—Cash.

31. (a) On hand	\$1,357 45	
32. (b) In banks	95,828 77	97,186 22

F.—Assets not hereinbefore Mentioned.

37. (a) Office premises, etc.		54,006 63
------------------------------------	--	-----------

Total assets owned beneficially by Corporation \$1,200,899 73

II.—Assets not Owned Beneficially by Corporation but for which the Corporation is Accountable.

B.—As Trustee, Representative, Guardian or Agent (without guarantee).

(a) Mortgage securities:—		
47. (i) Principal	\$147,504 23	
(b) On other securities:—		
49. (i) Principal	441,697 67	
52. (d) Uninvested trust funds	24,835 89	614,037 79
Total of assets II		
Gross total of assets I and II		\$1,814,937 52

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A. Balances from 31st December, 1903.

(Col. 1.) (Col. 3.) (Total Col. 4.)

(b) Cash (not already shown under (1)) :—

(i) On hand	\$ 485 77	
(ii) In bank	6,686 39	

B.—Sums received wholly or partly on Capital Stock.

4. (a) Calls on joint stock permanent capital	185,295 12	
---	------------	--

C.—Receipts on account of Investments, Loans or Debts.

(a) On mortgages of realty :—		
10. (i) Principal	17,900 47	
(ii) Interest	\$2,225 99	
(b) On other securities :—		
12. (i) Principal	577,486 77	
13. (ii) Interest on dividends	125,528 60	

E.—Miscellaneous.

18. (a) Commission, brokerage (or remuneration as Corporate agent, trustee, etc.)	18,938 53	
---	-----------	--

F.—Borrowed Money.

26. (b) Borrowed by taking deposits	48,139 12	
Totals	\$146,693 12	\$835,993 64
		\$982,686 76

II.—Received as Corporate Trustee, Representative, Guardian or Agent in Trust.

A.—Balance from 31st December, 1903.

33. (b) Cash in banks	\$23,864 68	
-----------------------------	-------------	--

B.—Receipts on account of Investments, etc.

34. (a) Mortgages: Principal, \$24,338.41; interest, \$8,678.98	33,017 39	
35. (b) On other securities: Principal, \$94,259.58	94,259 58	

D.—Received from other sources.

39. (a) Estates and agencies (capital and revenue) realisations and receipts, etc.	628,378 59	
Total		\$779,520 24

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

(Col. 1.) (Col. 3.) (Total Col. 4.)		
1. (a) Loaned on mortgages of realty	\$441,199 29	
(b) Loaned or invested in other securities :—		
2. (i) Debentures and stocks	323,721 94	

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$41,352 21	
Carried forward	\$41,352 21	\$764,921 23
		\$806,273 44

CASH ACCOUNT.—Continued.

Expenditure for the year ending 31st December, 1904.

	(Col. 1.)	(Col. 3.)	(Total Col. 4.)
Brought forward	\$41,362 21	\$764,921 23	\$806,273 44
C.—Borrowed Money.			
19. (a) Deposits: Principal, \$33,719.60; interest, \$12,782.52		46,502 12	
D.—Management Expenses.			
25. (a) Salaries, wages and fees	17,131 43		
26. (b) Commission or brokerage	1,498 92		
28. (d) Stationery, postage, printing and advertising	4,318 57		
29. (e) Law costs	563 28		
30. (f) Fuel, rent, taxes (other than in 7 and 32) and rates	3,649 66		
31. (g) Travelling expenses	67 00		
32. (h) Registration fees	105 00		
E.—Other Expenditure, viz.:			
33. (a) Office premises		1,403 90	
F.—Balance.			
33. (a) Cash on hand and in bank	\$101,273 44		
Totals	\$68,586 07	\$812,827 25	\$982,686 76
II.—Expended on Trust or Agency Account.			
A.—Loaned or Investd on Capital Account.			
42. (a) Loaned on mortgages of realty		\$40,019 61	
44. (b) In other securities, viz.:			
(i) Municipal bonds, etc.		207,616 97	
B.—Other Expenditures.			
53. (d) Estates and agencies payments on account of capital, revenue, etc.		511,134 99	
C.—Balance.			
54. (b) Cash in banks	\$20,748 67		
Totals	\$20,748 67	\$758,771 57	\$779,520 24

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. \$150,000.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905, \$11,769.50.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits, 4 per cent.; on debentures, none; on debenture stock, none.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, 5.96 per cent.; on other securities, 5.68 per cent.
7. Of the mortgages held by the Corporation, \$382,080.45 is on realty situate in Ontario, and \$223,335.74 on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. No. 2. Amount, \$1,900.
10. Aggregate market value of land mortgaged to the Corporation, \$1,240,256.74.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? General office staff. By Guarantee Company.
13. When were the accounts of the Corporation last audited? As at 31st December, 1904.
14. Names and addresses of the auditors for 1904 and 1905 (if appointed). For 1904: Harry Vigeon, F.C.A.; O. M. Hudson, C. A., Toronto, Ont. For 1905: Harry Vigeon, F.C.A., and O. M. Hudson, C.A., Toronto, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? January and July 1st; rate of dividend 5 per cent. per annum.
16. What is the date appointed for the Annual Meeting? Last Wednesday in January in each year.
17. Date of last Annual Meeting? 27th January, 1904.

THE TORONTO GENERAL TRUSTS CORPORATION.

Head Office, Toronto, Ontario.

The Toronto General Trusts Corporation was constituted on the 1st April, 1899, by special Act of Ontario, 62 Vic. (2) chap. 109, amalgamated into one company under the above name.

(1) The Toronto General Trusts Company, and (2) The Trusts Corporation of Ontario.

By an agreement made under The Loan Corporations Act in two indentures dated respectively 13th and 30th July, 1903, approved by Order-in-Council (Ontario) 11th September, 1903, the Toronto General Trusts Corporation acquired the assets and assumed the liabilities and duties of the Ottawa Trusts and Deposit Company. See also Special Act of the Province of Quebec (2nd June, 1904). 4 Edw. VII, chapter 93.

ANNUAL STATEMENT

Of the condition and affairs of The Toronto General Trusts Corporation, of Toronto, Ontario, at the 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at No. 59 Yonge Street, in the City of Toronto, in the Province of Ontario.

The Board is constituted of twenty-two directors, holding office for one year.

The directors and chief executive officers of the Corporation at the 31st December, 1904, were as follows, together with their respective terms of office:

John Hoskin, K.C., LL.D., President, Toronto, Ont.;	24th Feb. 1904;	22nd Feb. 1905
Hon. S. C. Wood, Vice-President, Toronto Ont.;	"	"
W. H. Beatty, Vice-President, Toronto, Ont.;	"	"
J. J. Kenny, Director, Toronto, Ont.;	"	"
John Bell, K.C., Director, Belleville;	"	"
John L. Blaikie, Director, Toronto;	"	"
W. R. Brock, M.P., Toronto;	"	"
Thomas Long, Director, Toronto;	"	"
J. W. Digby, M.D., Brantford;	"	"
W. D. Matthews, Director, Toronto;	"	"
Hon. Peter MacLaren, Director, Perth,	"	"
Hon. J. J. Foy, K.C., M.P.P., Director, Toronto;	"	"
E. B. Osler, M.P., Director, Toronto;	"	"
George Gooderham, Director, Toronto;	"	"
William Hendrie, Director, Hamilton;	"	"
D. B. Wilkie, Director Toronto;	"	"
J. G. Scott, K.C., Director, Toronto;	"	"
Æmilus Irving, K.C., Director, Toronto;	"	"
B. E. Walker, Director, Toronto;	"	"
Robert Jaffray, Director, Toronto;	"	"
Senator Fulford, Director, Brockville;	"	"
J. W. Langmuir, Managing Director, Toronto.	"	"

A.—Permanent capital stock: Total amount authorized, \$1,000,000; total amount subscribed, \$1,000,000, as more particularly set forth in Schedule A hereto:

SCHEDULE A.

(b) Fixed and permanent capital stock created by virtue of Joint Stock Companies Acts or Private Acts.

Description.	No. of shares.	Par value of shares.	Total amount held.	Total amount paid thereon.
1. Fully called.....	10,000	\$ 100	\$ 1,000,000	\$ 1,000,000

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed.)

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr.

Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

1. (a) Ordinary joint stock capital fully called: Total called, \$1,000,000; total paid thereon	\$1,000,000 00	
4. (d) Dividends declared in respect of (1) but not yet paid	37,500 00	
5. (e) Unappropriated profits in respect of (1)	14,521 20	
6. (f) Reserve fund in respect of (1)	300,000 00	
		\$1,352,021 20

C.—Liabilities to Stockholders other than already shown under A or B.

24. Profits on municipal debentures held in suspense	6,500 00	6,500 00
		\$1,358,521 20

Liabilities to the Public.

40. Other liabilities to the public:		
41. (a) Bank at Ottawa	3,861 59	
(b) Outstanding mortgage on office building at Ottawa	71,267 46	
(a) Sundry creditors	6,112 30	81,241 35
Total actual liabilities		\$1,439,762 55

Contingent Liabilities.

44. Claims against the Corporation not acknowledged as debts, viz.:	\$3,000 00	
45. (a) Interest reserved		
48. Money for which the Corporation is contingently liable:		
49. (a) Principal guaranteed { Court mortgages	\$1,464,152 40	
{ Court debentures	1,041,018 64	
{ Guaranteed agencies	1,077,490 28	
	3,582,661 23	
51. (c) Trust funds invested but not guaranteed:		
52. (i) Principal	9,242,600 63	
54. (d) Trust funds uninvested not bearing interest and not guaranteed	323,604 78	
Total contingent liabilities		\$13,151,806 64
Gross total liabilities, actual and contingent		\$14,591,569 19

Cr.

Assets.

I.—Assets of which the Corporation is the Beneficial Owner.

A.—Immovable Property Owned Beneficially by Corporation.

1. (a) Office premises situate as follows:		
2. (i) At Toronto, held in freehold	\$145,000 00	
3. (ii) At Ottawa	175,000 00	
5. (b) Freehold land (including buildings), other than foregoing	95,635 60	415,635 60

B.—Debts secured by mortgages of land.

9. (a) Debts (other than item 10) secured by mortgages of land	750,119 61	
10. (b) Debts secured by mortgaged land held for sale	3,990 00	
11. (c) Interest due or accrued on items 9 and 10 and not included therein	20,113 50	
(cc) Interest due or accrued on mortgages and securities other than 9 and 10	38,327 08	812,550 19

Forward \$1,228,186 79

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Cr.

Assets.—Continued.

Brought forward		\$1,228,185 79
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
14. (b) Debts secured by municipal bonds and debentures	678 61	
18. (f) Debts secured by stocks or bonds of any province of Canada.	200 00	
22. (j) Debts secured by Debentures Joint Stock Co.	75,600 00	
23. (k) Debts secured by call loans on stock and bonds	12,312 48	
		88,791 09
E.—Cash.		
31. (a) On hand	1,343 90	
32. (b) In bank	67,391 19	
		68,735 09
F.—Assets not hereinbefore mentioned.		
37. (a) Office vault and furniture	18,621 59	
38. (b) Goodwill Ottawa Trust and Deposit Co.	25,000 00	
39. (c) Accrued rents of buildings	2,342 95	
40. (d) Commissions	2,091 44	
41. (e) Auditors' allowance	2,765 00	
Winnipeg Trust Company	1,071 55	
Sundries	2,158 05	
		54,050 58
Total or assets owned beneficially by Corporation		\$1,439,762 55
II.—Assets not owned Beneficially by Corporation but for which the Corporation is Accountable.		
A.—As Guarantor.		
(a) Mortgage securities:		
43. (1) Principal.....	Court	\$1,470,879 40
	Guaranteed agencies	1,029,203 39
(b) Other securities:		
(1) Principal: Court debentures	1,042,084 13	
Debentures and call loans for guaranteed agencies	33,226 90	
		3,575,393 82
B.—As Trustee, Representative, Guardian or Agent (without guarantee).		
(a) Mortgage securities:		
47. (1) Principal	6,716,420 42	
48. (11) Interest due and accrued	36,151 76	
(b) Other securities:		
49. (1) Principal.....	Debentures	\$1,810,146 89
	Call loans	668,456 56
		2,478,603 45
(c) Premiums paid on debentures	41,707 51	
52. (d) Cash on hand and in banks	304,529 68	
Total of assets II.*		13,151,806 64
Gross total of Assets I. and II.		\$14,591,569 19

* In addition to the securities set out in the foregoing statement there remained in the hands of the Corporation as a Trust Company as at 31st December, 1904, real estate, mortgages and other assets represented to be of the value of about \$8,155,460.59.

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use.

A.—Balance From 31st December, 1903.

(Col. 1.) (Total Col. 4.)

(b) Cash not already shown under (1):			
2.	(i) On hand	864 79	
3.	(ii) In bank	85,567 58	
			886,432 37
C.—Receipts on account of Investments, Loans or Debts.			
(a) On mortgages of realty:			
10.	(i) Principal		214,979 73
11.	(ii) Interest on mortgages and other securities	89,370 78	
(b) On other securities:			
12.	(i) Principal		514,924 61
13.	(ii) Interest or dividends	18,180 45	
D.—Receipts from Real Estate Owned Beneficially by Corporation.			
17.	(b) Rents	27,184 18	
E.—Miscellaneous.			
18.	(a) Commission, brokerage (or remuneration as corporate agent, trustee, etc.)	92,798 83	
			227,534 24
G.—Receipts from other sources.			
30.	(a) Returns from borrowers for advances made in respect of taxes, insurance, etc.		121,708 92
Totals			\$1,166,579 87

II.— Received as Corporate Trustee, Representative, Guardian or Agent in Trust.

A.—Balances from 31st December, 1903.

(b) Cash (not included in 31):			
33.	(ii) In bank	337,653 25	
B.—Received on Account of Investments, Loans or Debts.			
34.	(a) On mortgages and call loans: Principal, \$1,514,138.72; interest, \$481,017.58	1,995,156 30	
35.	(b) On other securities: Principal, \$1,706,301 57; interest, \$308,331.71	2,014,633 28	
C.—Receipts from Real Estate.			
37.	(a) Sales (not included in foregoing items)	658,216 88	
38.	(b) Rents	179,299 46	
D.—Receipts from other sources, viz.:			
39.	(a) For investment	668,209 07	
40.	(b) Sundry realizations, collections, etc.	1,065,868 35	
Total			\$6,919,036 59

CASH ACCOUNT.

Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

(Col. 1.) (Total Col. 4.)

A.—Sums Loaned or Invested on Capital Account.

1.	(a) Loaned on mortgages of realty	\$316,612 01	
	(b) Loaned or invested in other securities	446,738 62	
7.	(c) Insurance or taxes advanced on property mortgaged to the Corporation	117,920 43	

B.—Expended on Stock Account.

8.	Dividends paid on permanent stock	75,000 00	75,000 00
----	---	-----------	-----------

CASH ACCOUNT.—Continued.

D.—Management Expenses (other than foregoing).	
25. (a) Salaries, wages and fees	81,927 42
26. (b) Commission or brokerage	7,693 53
26. (d) Stationery, postage, printing and advertising	12,130 14
29. (e) Law costs	1,826 30
30. (f) Fuel, rent, taxes (other than in 7) and rates	21,752 45
31. (g) Travelling expenses	2,713 12
32. (n) Registration fees	300 00
33. (i) Other management expenditure	3,641 71
	132,004 67
E.—Other Expenditure, viz.:	
34. (a) Office furniture	438 91
35. (b) Improvements and repairs to office buildings	9,191 73
36. (c) Interest on outstanding mortgage on office building at Ottawa	2,800 00
F.—Balance.	
37. (a) Cash on hand and in bank	64,873 50
Totals	\$1,165,579 87
II.—Expended on Trust or Agency Account.	
A.—Loaned or Invested on Capital Account.	
42. (a) Loaned on mortgages of realty	2,344,445 42
(b) Loaned or invested on or in other securities	1,068,363 55
47. (a) Real estate purchased	6,404 55
(b) Incumbrances of realty paid off:	
48. (i) Principal	49,525 95
49. (ii) Interest	9,843 16
	59,369 11
B.—Other Expenditures.	
50. (a) Commission or remuneration paid for management of estate, trust or agency (including item 26)	85,359 13
51. (b) Rents, taxes and rates	71,559 67
53. Sundry distributions, payments, returns, etc.	2,979,005 48
C.—Balance.	
54. (a) Cash on hand and in various banks	304,529 62
Totals	\$6,919,036 59

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31st DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. None.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. None.
3. Amount of other existing obligations of the Corporation which will mature in 1905. Guaranteed Funds, \$59,300.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$21,160.50.
5. Average rate of interest per annum paid by the Corporation during 1904, on deposits or debentures. No deposits taken or debentures issued.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages of realty, $5\frac{1}{2}$ per cent.; on other securities, $5\frac{1}{2}$ per cent.
7. Of the mortgages held by the Corporation, \$448,094.83 is on realty situate in Ontario, and \$389,774.43 is on realty situate elsewhere.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$1,700,000 about.
11. How often are the securities held by the Corporation valued? Annually in respect of doubtful loans.
12. (a) What officers of the Corporation are under bond and for what sum respectively? All officers and members of the staff are under bonds, aggregating about \$120,000, by Guarantee Companies.
13. When were the accounts of the Corporation last audited? To 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed)? For 1904: R. F. Spence, Geo. Macbeth, Toronto, Ont. For 1905: R. F. Spence, Geo. Macbeth, Toronto, Ont.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 2nd January, $3\frac{1}{2}$ per cent.; 2nd July, $3\frac{1}{2}$ per cent.
16. What is the date appointed for the Annual Meeting? The last Wednesday in February.
17. Date of last Annual Meeting? 22nd February, 1905.

THE UNION TRUST COMPANY, LIMITED.

Incorporated by Letters Patent of Ontario, dated 7th August, 1901. The Letters Patent authorized the Company to acquire and take over the assets, business and good-will of the Provincial Trust Company of Ontario, Limited.

ANNUAL STATEMENT

On the condition and affairs of the Union Trust Company, Limited, of Toronto, as at 31st December, 1904, and for the year ending on that day, made to the Registrar of Loan Corporations for the Province of Ontario, pursuant to the laws of the said Province.

The head office of the Corporation is at the corner of Bay and Richmond streets, in the City of Toronto, and Province of Ontario.

The Board is composed of eight directors holding office for one year.

The directors and chief executive officers at 31st December, 1904, were as follows, together with their respective terms of office.

Oronhyatekha, M.D., President, Toronto;	February, 1904;	February, 1905.
Hon. Geo. E. Foster, 1st Vice-President, Toronto;	"	"
Hon. Elliott G. Stevenson, 2nd Vice-President, Detroit;	"	"
Sir John A. Boyd, Director, Toronto;	"	"
Lt.-Col. J. A. McGillivray, K.C., Director, Toronto;	"	"
Hon. Geo. W. Ross, Director, Toronto;	"	"
Lt.-Col. J. I. Davidson, Director, Toronto;	"	"
Matthew Wilson, K.C., Director, Chatham;	"	"
Hon. Geo. E. Foster, General Manager, Toronto.		

A. Permanent capital stock: Total amount authorized, \$2,000,000; total amount subscribed, \$2,000,000, as more particularly set out in Schedule A hereto.

SCHEDULE A.

b) Fixed and Permanent capital stock created by virtue of Joint Stock Companies Acts or Private Acts.

Description.	No. of Shares.	Par value of shares.	Total amount held.	Total amount paid thereon.	Total remaining unpaid on calls.
		\$	\$	\$	\$
1. Fully called.....	20,000	100	2,000,000*	2,000,000	.....
Totals.....	20,000	100	2,000,000	2,000,000	.....

LIST OF SHAREHOLDERS AS AT 31ST DECEMBER, 1904.

(Not printed).

BALANCE SHEET AS AT 31ST DECEMBER, 1904.

Dr. Capital and Liabilities.

Capital (Liabilities to Stockholders or Shareholders).

A.—Permanent Capital Stock or Shares.

2. (b) Ordinary joint stock capital fully called: Total called	\$2,000,000 00
\$2,000,000; total paid thereon	280,000 00
6. (f) Reserve fund in respect of (2)	280,000 00

Forward	\$2,280,000 00
---------------	----------------

BALANCE SHEET.—Continued.

Brought forward		\$2,280,000 00
C.—Liabilities to Stockholders other than as shown under A or B, viz.:		
36. Balance at credit of profit and loss account.....		6,617 80
		<u>\$2,286,617 80</u>
Liabilities to the Public.		
37. Owing to banks (including interest due or accrued)		609,371 35
40. Other liabilities to the public, viz.:		
41. (a) Capital of other companies		27 28
		<u>\$2,896,016 43</u>
Contingent Liabilities.		
48. Money for which the Corporation is contingently liable:		
49. (a) Principal guaranteed	\$1,465,064 43	
51. (c) Trust funds invested, but not guaranteed:		
52. (1) Principal	55,054 00	
53. (2) Interest	54-65	
55. (e) Other contingent liabilities	40,486 34	
Total contingent liabilities		<u>\$1,560,659 42</u>
Cr.	Assets.	
I.—Assets of which the Corporation is the Beneficial Owner.		
A.—Immovable Property owned Beneficially by Corporation.		
5. (b) Freehold land, including buildings other than foregoing (investment)		\$246,090 81
B.—Debts secured by mortgages of land.		
9. (a) Debts (other than item 10) secured by mortgages of land	\$451,737 81	
11. (c) Interest due or accrued on item 9 and not included therein ..	84,894 53	
		<u>536,632 34</u>
C.—Debts not above enumerated for which the Corporation holds securities as follows:		
22. (j) Debts secured by bonds, debentures and stocks	736,731 87	
25. (n) Interest due and accrued on item 22, and not included therein	16,505 59	
		<u>753,237 46</u>
E.—Cash.		
31. (a) On hand		760 73
F.—Assets not hereinbefore mentioned.		
37. (a) Due from agents	741 66	
38. (b) Stocks	1,121,350 50	
39. (c) Bonds	225,425 00	
40. (d) Accrued dividends and interest	11,778 03	
		<u>1,359,295 09</u>
Total assets I.		<u>\$2,896,016 43</u>
II.—Assets not owned Beneficially by the Corporation, but for which the Corporation is Accountable.		
A.—As Guarantors.		
(a) Mortgage securities:		
43. (i) Principal	\$1,378,137 34	
(b) Other securities:		
45. (i) Standard Bank	86,927 09	
B.—As Trustee, Representative, Guardian or Agent (without guarantee).		
(a) Mortgage securities:		
47. (i) Principal	45,070 64	
48. (ii) Interest due or accrued	150 00	
(b) On other securities:		
49. (i) Principal Stocks	9,888 00	
52. (d) Uninvested trust funds	40,486 34	
Total of Assets II.		<u>\$1,560,659 42</u>

CASH ACCOUNT.

Receipts for the year ending 31st December, 1904.

I.—Received by the Corporation for its Own Use..

A.—Balance from 31st December, 1903.

	(Col. 3.)	(Total Col. 4.)
1 (a) Capital account	\$995,500 00	
Reserve	250,000 00	

(b) Cash not already shown under (1):

3. (ii) In bank		\$75 00
-----------------------	--	---------

B.—Sums received Wholly or Partly on Capital Stock.

4. (a) Calls on joint stock permanent capital	1,000,500 00	
---	--------------	--

C.—Receipts on Account of Investments, Loans or Debts.

(a) On mortgages of realty:

10. (i) Principal	87,087 12	
11. (ii) Interest	53,909 20	

(b) On other securities:

12. (i) Principal	350,094 34	
13. (ii) Interest or dividends	53,563 87	

E.—Miscellaneous.

18. (a) Commission, brokerage (or remuneration as Corporate Agent, Trustee, etc.)	8,975 05	
19. (b) Premium or bonus on loans	552 96	

F.—Borrowed Money.

25. (a) Bank or other advances, discounts or overdrafts	205,000 00	
28. (d) Receipts from safe deposit department	431 00	
29. (e) Receipts from sundries	4,978 90	

G.—Receipts from other sources.

30. (a) For investment	417,851 07	
(b) Companies' capital	143,533 46	
(c) Collections on mortgages and debentures	119,643 00	

Totals	\$2,446,194 96	
--------------	----------------	--

II.—Received as Corporate Trustee, Representative, Guardian or Agent in Trust.

A.—Balance from 31st December, 1903.

(b) Cash:

32. (i) In bank	\$18,579 30	
-----------------------	-------------	--

B.—Received on account of Investments, Loans or Debts..

34. (a) On mortgages: Principal, \$5,708.80; interest, \$2,403.79	2,403 79	5,708 80
35. (b) On other bonds: Principal, \$14,250; interest, \$641.26	641 26	14,250 00
36. (c) On stocks: Principal, \$8,049.53; interest, \$780	780 00	8,049 53

C.—Receipts from Real Estate.

37. (a) Sales (not included in any of foregoing items)....	4,922 68	
38. (b) Rents	6,509 38	

D.—Receipts from other Sources.

39. (a) Estates capital	22,598 28	
40. (b) Estates revenue	1,609 64	

Totals	\$11,944 07	\$74,108 69	\$86,052 76
--------------	-------------	-------------	-------------

*Expenditure for the year ending 31st December, 1904.

I.—Expended on Corporation Account.

A.—Sums Loaned or Invested on Capital Account.

	(Col. 1.)	(Total Col. 4.)
1. (a) Loaned on mortgages of realty		\$12,224 08
2. (b) Loaned or invested in other securities:		
3. (i) Stocks		330,300 00
4. (ii) Bonds		92,000 00
5. (iii) Collateral loans		761,322 91
6. (d) Incumbrances on realty paid off		136,817 96
7. (e) Insurance or taxes advanced on property mortgaged to the Corporation		6,359 53

B.—Expended on Stock Account.

8. Dividends paid on permanent stock	\$57,440 13	57,440 13
--	-------------	-----------

C.—Borrowed Money (other than foregoing) or interest thereon paid, viz.:

18. (a) Bank account (principal and interest)	166,150 91	
19. (b) Principal	12,203 24	
24. (g) Guarantees paid	53,256 93	
		231,611 08

D.—Management Expenses (other than foregoing).

25. (a) Salaries, wages and fees	18,223 72	
26. (b) Commission or brokerage	3,367 50	
28. (d) Stationery, postage, printing and advertising	1,823 47	
30. (f) Fuel, rent and taxes (other than in 7 and 32) and rates	3,049 66	
31. (g) Travelling expenses	1,632 00	
33. (i) Other management expenditure	371 00	
		28,467 35

E.—Other Expenditures, viz.:

Sundry payments	27,749 72	
34. (a) Guaranteed investment	334,959 05	
35. (b) Companies' capital	212,679 30	
36. (c) Collection on mortgages and debentures	125,158 02	
Guarantee deposits	1,418 01	

F.—Balance.

37. (a) Cash on hand and in banks		\$7,687 82
Totals		2,446,194 96

II.—Expended on Trust or Agency Account.

A.—Loaned or Invested on Capital Account.

42. (a) Loaned on mortgages of realty	\$20,118 10	
43. (b) Incumbrances on realty paid off, viz.:		
49. (ii) Interest	\$1,346 53	

B.—Other Expenditure.

50. (a) Commission or remuneration paid for management of estates	707 42	
51. (b) Rents, taxes, rates	2,008 66	
53. (d) Sundry capital and revenue disbursements	11,419 30	9,966 41

C.—Balances:

54. (b) Cash on hand in banks		40,486 34
-------------------------------------	--	-----------

Totals	\$15,481 91	\$70,570 85	\$86,052 76
--------------	-------------	-------------	-------------

MISCELLANEOUS STATEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1904.

1. Amount of debentures issued by the Corporation in Canada which will mature in 1905. Debentures are not issued.
2. Amount of debentures issued by the Corporation elsewhere which will mature in 1905. Debentures are not issued.
3. Amount of other existing obligations of the Corporation which will mature in 1905. \$99,061.29.
4. Amount of securities held by the Corporation which will mature and become payable to the Corporation in 1905. \$125,778.00.
5. Average rate of interest per annum paid by the Corporation during 1904; on guaranteed investments. 4 per cent.
6. Average rate of interest per annum received by the Corporation during 1904, on mortgages or realty, about 7 per cent.; on other securities, about 6 per cent.
7. Of the mortgages held by the Corporation, \$33,571.00 is on realty situate in Ontario, and \$416,177.99 is on realty situate elsewhere; all in Dominion of Canada.
8. Loans written off or transferred to real estate account during 1904. None.
9. Number and aggregate amount of mortgages upon which compulsory proceedings have been taken by the Corporation in 1904. None.
10. Aggregate market value of the land mortgaged to the Corporation, \$1,185,500.00.
11. How often are the securities held by the Corporation valued? Yearly.
12. (a) What officers of the Corporation are under bond and for what sum respectively? General Manager, \$10,000; Assistant Manager, \$2,500; Accountant, \$2,000; Teller, \$2,000; other Clerks, \$2,500, \$1,000 and \$500 respectively. By Guarantee Companies.
13. When were the accounts of the Corporation last audited? 31st December, 1904.
14. Names and addresses of the auditors respectively for 1904 and 1905 (if appointed)?
For 1904: A. C. Neff. F.C.A., and C. W. R. Postlethwaite, C.A., Toronto.
For 1905: A. C. Neff. F.C.A., and C. W. R. Postlethwaite, C.A., Toronto.
15. What were the dividend-days of the Corporation in 1904, and what rate or rates of dividend were paid on those days respectively? 31st December, 1904. 4 per cent.
16. What is the date appointed for the Annual Meeting? 28th February, 1905.
17. Date of last Annual Meeting? 23rd February, 1904.

COMPARATIVE TABLES

Showing Liabilities, Assets, Receipts and
Expenditures, Etc.

COMPARATIVE Showing Liabilities,

Liabilities and Assets.	Loan Companies having only permanent stock.		Loan Companies having permanent stock, terminating
	1903.	1904.	1903.
	\$ c.	\$ c.	\$ c.
Capital Stock.			
Capital authorized (permanent)	100,776,139 95	*100,282,237 95	7,385,660 00
Capital subscribed (permanent)	55,529,109 95	†55,112,597 95	17,980,770 00
Capital subscribed (terminating)			
Liabilities.			
Liabilities to Shareholders:			
Permanent	21,685,936 63	22,285,746 54	1,801,600 00
{ Stock fully paid up			
{ Stock paid up in part	9,062,712 03	8,586,026 19	4,206,414 13
Terminating			
{ Stock fully paid			
{ Prepaid			138,572 61
{ Instalment stock			826,302 25
Reserve fund	9,687,100 43	10,888,791 62	3,986,276 56
Dividends declared and unpaid	714,041 43	744,987 86	429,219 96
Contingent fund	631,243 40	633,036 94	173,053 90
Unappropriated profits	659,606 05	613,421 62	230,390 76
Profits on terminating stock			29,002 99
Other liabilities to shareholders	80,995 22	24,073 37	365,468 39
Total liabilities to shareholders	42,371,685 19	43,226,084 16	11,640,923 95
Liabilities to the public:			
Deposits	18,574,732 07	19,321,831 50	356,952 65
Interest on deposits	168,110 30	178,116 82	5,944 50
Debentures payable in Canada	15,612,036 74	16,816,082 15	2,087,412 76
Debentures payable elsewhere	34,927,503 55	34,179,246 61	15,359 39
Debenture stock	2,808,056 92	3,446,475 99	
Interest on debentures and debenture stock	454,499 81	468,555 62	25,225 13
Due on loans in process of completion	386,984 94	261,128 66	78,811 69
Owing to banks	387,894 72	755,199 26	66,274 56
Other liabilities to public	393,495 35	270,753 52	625,181 69
Total liabilities to public	73,713,313 93	75,692,390 13	3,261,162 67
Contingent liabilities			
Grand total liabilities to shareholders and public	116,084,999 09	118,918,474 29	14,902,086 62
Assets.			
Debts secured by mort- } Mortgages of realty	89,960,808 37	93,840,669 81	11,491,136 72
gages of land	1,611,975 10	1,056,836 05	243,351 73
Interest	1,235,651 72	1,288,047 76	270,039 51
Debts secured by:			
Debentures and debenture stock	2,212,127 68	2,296,206 85	208,536 52
Government securities	779,524 34	812,916 23	
Shareholders' stock	647,668 91	610,231 47	251,031 12
Stocks, bonds and securities, other than foregoing	14,157,929 67	14,108,687 16	546,238 00
Office premises	1,323,581 86	1,242,414 15	104,096 81
Freehold land	1,401,434 79	577,559 08	893,669 37
Office furniture	9,512 75	10,147 91	19,461 90
Cash	2,653,300 84	3,028,163 38	721,362 45
Other assets	91,453 06	46,594 44	153,192 19
Balance—profit and loss			
Not owned beneficially			
Total assets	116,084,999 09	118,918,474 29	14,902,086 62

* Huron and Bruce Loan and Investment Company: Company dissolved, its Assets and Liabilities having been taken over by the Standard Loan Company. O.C. (Ont.) 4th January, 1905.

† Toronto Mortgage Company: Amalgamation of The Union Loan and Savings Company and The Building and Loan Association. O.C. (Ont.) 15th December, 1899; and Certificate of Registrar of Loan Corporations. 23rd September, 1904.

TABLES.

and Assets

ies having ter- as well as per- or having ter- stock only.	Loaning Land Companies.		Trust Companies.		Grand Totals.	
	1904	1903	1904	1903	1903	1904
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
7,456,220 00	13,2 3,333 33	4,842,833 90	13,233,333 33	8,200,000 00	122,209,473 28	121,715,571 28
15,825,780 00			4,730,176 20	7,100,000 00	74,957,603 85	74,598,994 15
					17,980,770 00	15,825,780 00
1,894,750 00	1,297,77 00		1,361,670 00	2,739,500 00	27,524,856 63	30,445,116 54
4,284,001 26	2,156,964 06		1,967,405 45	1,498,709 44	16,924,799 66	15,328,456 95
205,932 06					138,572 61	205,932 05
647,242 59					826,932 25	647,242 59
3,318,098 59					3,386,376 56	3,318,098 59
501,466 60	492,166 66		522,166 66	915,000 00	11,423,487 07	12,427,424 58
177,812 72	15,104 57		15,010 97	74,648 50	978,848 40	1,020,987 32
297,887 20	21,140 80		153,791 78	6,500 00	882,774 96	1,091,215 92
21,681 55	207,496 27		110,556 01	131,810 67	1,027,415 98	884,145 10
288,626 92					326,468 39	288,626 92
123,840 52			476 93	10,000 00	133,987 60	148,390 82
11,765,340 00	4,190,642 36		4,131,077 80	5,369,168 61	63,572,420 11	65,805,687 88
463,594 15	272,895 26		291,084 41	56,525 97	19,260,805 95	20,150,485 65
6,287 92	4,134 83		4,562 40	2,319 12	180,509 05	191,465 76
2,082,066 28	810,348 00		727,497 37		18,509,792 50	19,575,645 80
33,871 85	659,157 81		524,095 60		35,602,020 75	34,737,214 06
25,125 75	18,761 23		17,756 42		2,808,056 92	3,446,475 99
151,228 48				65,271 38	498,485 67	506,437 19
24,653 19	262,761 12		249,550 71	623,325 51	531,068 01	433,085 41
763,896 57	30,335 90		52,975 10	75,710 58	1,840,255 91	1,642,636 10
				77,407 04	1,124,728 52	1,165,082 23
3,500,724 19	2,057,889 15		1,870,472 01	823,352 56	79,855,718 28	81,848,419 19
	9,598 83		8,377 13	21,494,786 64	24,303,995 68	21,504,385 47
15,266,064 19	6,258,130 34		6,009,926 94	27,687,307 81	161,982,523 86	171,966,429 68
11,814,369 68	496,365 48		478,101 20	2,385,443 66	104,274,754 23	108,327,499 84
255,371 82	122,13 07		25,743 65	17,831 87	1,995,271 77	1,341,941 52
287,725 87	18,059 98		16,012 33	219,773 17	1,743,554 38	1,862,859 73
17,759 24	2,452 30		2,452 30	287,454 52	2,710,571 02	2,556,208 13
261,630 76	17,499 49		17,489 49	400 00	779,924 34	813,916 23
736,244 54	1,850,031 06		1,991,678 31	8,024 69	924,214 21	889,351 72
117,695 23				2,708,400 17	19,262,588 90	20,068,892 49
1,110,038 56	3,332,265 72		3,092,251 68	680,000 13	2,107,728 80	2,037,259 08
20,9 3 24	1,903 76		1,454 31	168,279 37	5,795,649 25	5,132,391 51
499,200 21	84,751 90		106,213 16	50,709 00	81,387 41	80,681 15
145,104 91	113,536 36		108,532 50	3,679,97 87	3,763,215 46	3,938,687 13
	209,642 39		261,620 84	66,612 24	424,763 75	342,782 55
	9,594 83		8,377 13	**20,846,529 12	209,692 39	211,620 84
				**24,303,995 68	20,751,127 95	24,312,372 81
15,266,064 19	6,258,130 34		6,009,926 94	27,687,307 81	164,982,523 86	171,966,429 68

** Not including certain securities as yet unrealized which have come into the hands of the companies as Trust Corporations.

Receipts and Expenditure.	Loan Companies having only permanent stock.		Loan Companies mininating stock. manent stock. minating
	1903.	1904.	1903.
Receipts.			
I.—Received by the Corporation for its Own Use.	\$ c.	\$ c.	\$ c.
Cash Balance 31st December, 1902-1903.....	8,412,886 02	2,321,732 10	451,932 13
Received from shareholders during the year	863,820 74	265,741 31	2,139,354 88
Received from borrowers (principal and interest).....	37,626,905 19	34,686,930 98	3,653,316 13
Real estate.. { Rents.....	127,077 75	125,319 25	23,806 86
{ Sales.....	178,993 86	620,402 47	83,152 30
Bank advances.....	383,103 67	268,605 72	80,763 58
Borrowed money.....			5,000 00
Received from depositors during the year.....	27,643,076 50	29,774,083 49	611,431 18
Debentures issued during the year.....	8,427,853 94	9,187,652 90	598,007 40
Debenture stock sold during the year.....	48,666 67	48,666 67	
Bank interest.....	18,569 86	22,427 30	
Miscellaneous.....	623,970 63	418,517 20	491,881 82
Forfeited to Company.....			95,924 99
Total.....	79,354,874 83	77,740,029 39	8,184,571 27
II.—Received as Corporate Trustee, Representative, Guardian or Agent In Trust.			
Cash balance 31st December, 1902-1903.....			
Received from borrowers during the year.....			
Real estate.. { Rents.....			
{ Sales.....			
Money received for investment.....			
Other receipts.....			
Total.....			
Grand total receipts.....	79,354,874 83	77,740,029 39	8,184,571 27
Expenditure.			
I.—Expended on Corporation Account.			
Loaned during the year on mortgages.....	13,983,127 46	15,510,737 97	2,386,309 77
Loaned during the year on other securities.....	20,264,563 22	16,184,597 35	601,201 76
Real estate purchased and encumbrances paid off.....	397,028 96	219,354 64	352,084 12
Insurance and taxes advanced.....	195,644 98	67,579 46	25,044 31
Dividends... { Permanent.....	1,667,425 32	1,700,782 27	347,707 01
{ Terminating.....			212,513 82
Repaid bank.....	104,069 87	407,147 51	15,329 94
Repaid borrowed money.....			27,165 03
Deposits paid off (principal and interest).....	28,048,125 68	29,500,601 79	726,191 99
Debentures paid off.....	9,267,400 74	9,400,369 37	495,581 57
Debentures stock paid off " ".....	574,394 64	16,801 58	
Paid for withdrawn, converted, matured or retired stock.....			1,522,802 42
Forfeited to Company.....			95,057 96
Cost of management.....	833,212 71	895,869 55	363,454 84
Other.....	1,070,935 34	560,110 19	322,770 26
Balance cash 31st December, 1903-1904.....	2,339,082 07	2,602,913 20	738,456 47
Balance.....	655,363 84	673,164 56	
Total.....	79,354,874 83	77,740,029 39	8,184,571 27
II.—Expended on Trust or Agency Account.			
Loaned during the year on mortgages.....			
" " " " " " other securities.....			
Repayment of trust funds.....			
Other.....			
Balance.....			
Total.....			
Grand total of expenditure.....	79,354,874 83	77,740,029 39	8,184,571 27

Continued.

and Expenditures.

ies having ter- as well as per- or having ter- stock only.			Loaning Land Companies.			Trusts Companies.			Grand Total.											
1904.			1903.			1904.			1903.			1904.								
\$ c.			\$ c.			\$ c.			\$ c.			\$ c.								
737,618 44			79,110 79			61,808 52			261,992 87			297,822 99			4,205,871 81			8,418,982 05		
2,222,419 94			2,863 08			755 71			870,466 24			1,201,764 61			8,376,504 94			3,690,881 47		
3,827,452 63			3,377,550 01			844,802 05			4,033,787 69			3,602,510 82			48,691,559 02			42,961,696 48		
31,213 57			133,533 70			153,735 20			48,961 06			59,707 91			333,379 37			369,975 98		
40,156 74			121,076 38			114,121 15			100,859 13			13,675 08			494,081 67			788,355 39		
10,000 00			883,008 86			243,279 59						311,506 80			1,296,875 61			833,392 11		
17,789 33			523 35			20,194 29									5,523 35			37,983 62		
1,066,954 00			336,121 85			313,454 93			50,313 50			48,139 12			28,640,973 03			81,202,581 54		
629,251 55			771,875 04			123,152 36									9,797,736 38			9,940,056 81		
															48,686 67			48,686 67		
															18,569 86			22,427 30		
339,512 07			93,678 86			170,358 80			1,243,791 81			242,467 46			2,453,323 12			1,167,855 53		
20,486 31															95,924 99			20,486 31		
8,939,854 48			5,799,341 42			2,045,662 60			6,110,202 80			5,777,594 74			99,448,989 82			94,503,141 21		
									484,065 60			1,785,084 77			484,065 60			1,785,084 77		
									6,529,280 45			6,161,007 21			6,529,280 45			6,161,007 21		
									234,610 89			192,583 39			234,610 89			192,583 39		
									577,232 57			774,527 90			577,232 57			774,527 90		
									14,534,944 10			16,357,191 69			14,534,944 10			16,357,191 69		
									661,649 57			152,523 23			661,649 57			152,523 23		
									23,021,783 18			25,422,918 19			23,021,783 18			25,422,918 19		
8,939,854 48			5,799,341 42			2,045,662 60			29,131,985 48			31,200,512 93			122,470,773 00			119,926,059 40		
2,360,629 41			66,330 56			10,310 72			1,274,832 39			1,571,479 83			17,610,500 18			19,453,157 93		
608,949 80			2,367,159 59			610,086 58			2,793,871 03			2,528,402 73			26,033,795 60			19,832,036 46		
109,733 15			6,853 61			132,179 87			216,554 06			162,638 28			972,520 75			623,905 94		
45,589 53			741 39						149,375 55			181,244 37			370,806 23			244,413 36		
377,681 44			60,000 00			60,000 00			157,930 35			241,815 20			2,233,062 68			2,380,278 91		
182,524 75															212,513 82			182,524 75		
78,872 10			631,334 70			239,852 79			128,219 35			284,890 95			878,953 86			1,010,733 85		
21,313 22			313 75			1,591 57									27,478 78			22,904 79		
959,730 81			407,218 27			355,629 72			70,726 33			46,502 12			29,252,262 27			30,862,464 44		
602,204 03			1,189,805 31			402,105 83									10,952,787 62			10,404,679 23		
															574,394 64			16,801 53		
2,261,224 27															1,522,802 42			2,261,224 27		
19,977 06															95,057 96			19,977 06		
367,218 47			33,291 24			55,006 30			354,081 01			330,460 22			1,579,934 87			1,648,554 54		
446,808 23			974,514 09			101,632 16			1,241,434 06			41,584 26			3,612,653 75			1,150,134 84		
497,398 21			61,778 91			77,267 06			296,242 24			392,163 00			3,435,559 69			3,569,741 47		
															635,843 84			673,164 56		
8,939,854 48			5,799,341 42			2,045,662 60			6,686,266 37			5,731,150 96			100,020,948 96			94,456,697 43		
									3,566,087 28			3,759,348 77			3,566,087 28			3,759,348 77		
									2,563,902 78			2,273,576 79			2,563,902 78			2,273,576 79		
									13,675,680 18			16,129,361 30			13,675,680 18			16,129,361 30		
									833,452 35			735,534 83			833,452 35			735,534 83		
									1,786,590 52			2,571,520 28			1,786,590 52			2,571,520 28		
									22,445,719 11			25,469,361 97			22,445,719 11			25,469,361 97		
8,939,854 48			5,799,341 42			2,045,662 60			29,131,985 48			31,200,512 93			122,470,773 00			119,926,059 40		

COMPARATIVE

Shewing Miscel

Miscellaneous.	Loan Companies having only permanent stock.		Loan Companies having only permanent stock
	1903.	1904.	1903.
Miscellaneous Details.	\$ c.	\$ c.	\$ c.
Loans written off or transferred to real estate	206,514 20	182,055 20	123,717 68
Debentures maturing during 1904-1905.....	10,503,086 34	11,512,836 69	322,595 00
Average rate of interest paid on :	per cent.	per cent.	per cent.
1. Deposits	3.383	3.323	3.7
2. Debentures	3.927	3.956	4.5
3. Debenture Stock	4.		
Average rate of interest received on :			
Mortgages of realty	5.598	5.657	8.02
Other securities	5.071	5.066	7.28
Number and amount of mortgages enforced) No.....	172	134	123
Amount.....	\$308,056 93	\$260,361 70	\$105,608 17

TABLES.—Continued.

aneous details.

ies having ter- as well as per- or having ter- stock only.	Loaning Land Companies.		Trusts Companies.		Grand Totals.	
1904.	1903.	1904.	1903.	1904.	1903.	1904.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
134,545 72	57,120 12	39,399 55	5,567 65	2,848 62	892,919 65	358,849 09
290,064 21	116,560 00	83,305 00			10,941,231 34	11,886,205 90
percent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
3.625	4.45	4.175	4.062	3.916	3.898	3.759
4.54	4.39	4.393			4.272	4.296
					4	
7.674	5.33	5.25	6.02	5.8306	6.242	6.102
7.95		5	5.494	5.462	5.948	5.869
76	none.	none.	1	2	296	212
\$33,675 51	"	"	\$4,500 00	\$1,900 00	\$418,165 10	\$345,937 21

LIST OF LOAN CORPORATIONS

LIST OF LOAN

Page.	Name of Company.	Chief Office in Ontario.	Manager, Secretary or *Chief Agent. †Acting Manager.
198	Acme Loan and Savings Company	Toronto	W. J. Hodgson
19	Agricultural Savings and Loan Company.....	London	C. P. Butler.....
	Birkbeck Loan Company (London, Ont.) (a) .....	" .....	.....
22	British Canadian Loan and Investment Company (Limited)	Toronto	Ernest S. Ball.....
25	British Mortgage Loan Company of Ontario	Stratford	William Buckingham....
28	Brockville Loan and Savings Company (Limited).....	Brockville....	H. B. White.....
31	Canada Landed and National Investment Company (Limited) ..	Toronto	Edward Saunders
34	Canada Permanent Mortgage Corporation	"	John Massey.....
248	Canada Trust Company	London	Geo. A. Somerville
160	Canadian Birkbeck Investment and Savings Company.....	Toronto	F. W. G. Fitzgerald
202	Canadian Homestead Loan and Savings Association	"	A. J. Pattison.....
206	Canadian Savings, Loan and Building Association	"	A. E. Nash
37	Canadian Savings and Loan Company of London, Canada	London	M. H. Rowland.....
40	Central Canada Loan and Savings Company	Peterboro ..	E. R. Wood (Toronto)...
43	Chatham Loan and Savings Company.....	Chatham	S. F. Gardiner.....
165	Colonial Investment and Loan Company	Toronto	A. J. Jackson
46	Credit Foncier Franco-Canadien, Montreal.....	"	*W. E. Long.....
50	Crown Savings and Loan Company.....	Petrolea	Wm. English
210	Dominion Permanent Loan Company.....	Toronto	F. M. Hollaud.....
53	Dominion Savings and Investment Society	London	Nathaniel Mills
224	Dovercourt Land, Building and Savings Company (Limited)	Toronto	A. J. Williams
56	Dyment Securities, Loan and Savings Company.....	Barrie	S. Dyment.....
59	East Lambton Farmers' Loan and Savings Company	Forest	Newton Tripp
156	Essex County Savings and Loan Company.....	Windsor	F. H. McPherson
153	Frontenac Loan and Investment Society	Kingston	Lt.-Col. S. C. McGill
62	Grey and Bruce Loan Company.....	Owen Sound..	Wm. P. Telford
65	Guelph and Ontario Investment and Savings Society.....	Guelph	John E. McElderry
170	Hamilton Mutual Building Society	Hamilton	Walter Anderson
68	Hamilton Provident and Loan Society	"	C. Ferrie
173	Home Building and Savings Association (of Ottawa)	Ottawa	C. A. Douglas
72	Home Savings and Loan Company (Limited).....	Toronto	James Mason
	Huron and Bruce Loan and Investment Company (b) .....	.....	.....
76	Huron and Erie Loan and Savings Company	London	Geo. A. Somerville
80	Huron and Lambton Loan and Savings Company.....	Sarnia	W. A. Smart.....
83	Imperial Loan and Investment Company of Canada (Limited) ..	Toronto	Thos. T. Rolph
252	Imperial Trusts Company of Canada	"	†A. C. Cooch
86	Industrial Mortgage and Savings Company.....	Sarnia	D. N. Sinclair.....
89	Lambton Loan and Investment Company.....	"	James H. Kittermaster ..
92	Landed Banking and Loan Company.....	Hamilton.....	C. W. Cartwright

(a) The Birkbeck Loan Company, London, Ont., now in liquidation. On 29th April, 1905, County Judge (Edward) Elliott granted a winding-up order under R.S.O., 1897, c. 222, naming as interim liquidator the London and Western Trusts Company of London, Ontario, which Company was on the 26th May, 1905, appointed permanent liquidator.

CORPORATIONS.

President.	Description of Company.	When incorporated.		Financial statement for year ending
W. W. Hodgson.....	Loan Co.	24th June,	1889	December 31st, 1904.
W. J. Reid	"	3rd May,	1872	"
.....	"	11th February,	1893	"
A. H. Campbell	"	12th April,	1876	"
Hon. Thos. Ballantyne.....	"	5th October,	1877	"
W. H. Cole	"	11th May,	1885	"
John L. Blaikie .....	" .....	.....	1858	"
George Gooderham.....	"	1st March,	1855	"
Verschoyle Cronyn.....	Trusts Co.....	31st January,	1901	"
H. P. Dwight	Loan Co.....	11th August,	1899	"
J. N. Curry.....	"	24th September,	1886	"
W. J. Hambly	"	11th February,	1890	"
John W. Jones	"	2nd September,	1875	"
Hon. Geo. A. Cox	"	7th March,	1884	"
Arch. Bell	"	27th September,	1881	"
George H. Gooderham	"	14th June,	1900	"
George Brolemann	"	January,	1881	"
J. H. Fairbank.....	"	30th January,	1882	"
Hon. J. R. Stratton	"	7th May,	1890	"
Thos. H. Purdom, K.C.	"	20th April,	1872	"
Richard H. Greene.....	Loaning Land Co.....	16th December,	1885	"
N. Dymont.....	Loan Co.....	15th May,	1902	"
James Hutton, M.D.	"	19th December,	1891	"
John Curry	"	3rd September,	1902	"
Sir Rich. Cartwright, G.C.M.G., P.C.	"	13th August,	1863	"
S. J. Parker	"	10th May,	1889	"
Alexander B. Petrie	"	19th January,	1876	"
Alfred Ward	"	31st October,	1890	30th November,
Alexander Turner	"	6th June,	1871	31st December,
John R. Armstrong	"	24th June,	1890	"
Eugene O'Keefe	"	25th April,	1877	"
.....
John W. Little.....	"	18th March	1864	"
F. F. Pardee.....	"	1st November,	1877	"
John H. Tilden	"	19th August,	1869	"
Geo. H. Gooderham	Trusts Co.....	23rd June,	1887	"
John Cowan, K.C.	Loan Co.	20th August,	1889	"
Isaac Unsworth.....	"	27th March,	1847	"
Matthew Leggat	"	16th December,	1876	"

(b) The Huron and Bruce Loan and Investment Company.—Company dissolved. Its assets and liabilities have been taken over by the Standard Loan Company. Order-in-Council (Ont.), 4th January, 1905.

LIST OF LOAN

Page.	Name of Company.	Chief office in Ontario.	Manager, Secretary or *Chief Agent. †Acting Manager.
227	Land Security Company	Toronto	Edward R. Greig
96	London and Canadian Loan and Agency Company (Limited) ..	"	Vernon B. Wadsworth ..
99	London Loan Company of Canada	London	Malcolm John Kent
255	London and Western Trusts Company (Limited)	"	John S. Moore
102	Midland Loan and Savings Company	Port Hope	Geo. M. Furby
259	National Trusts Company (Limited)	Toronto	W. T. White
176	Niagara Falls Building, Savings and Loan Association	Niagara Falls	Janet L. Harriman
150	North British Canadian Investment Company (Limited)	Toronto	*J. D. McMurrich
105	North of Scotland Canadian Mortgage Company (Limited)	"	*Osler & Hammond
109	Ontario Building and Savings Society	Kingston	James McArthur
112	Ontario Loan and Debenture Company	London	Wm. F. Bullen
115	Ontario Loan and Savings Company	Oshawa	T. H. McMillan
179	Owen Sound Building and Savings Society	Owen Sound	C. A. Fleming
118	Oxford Permanent Loan and Savings Society	Woodstock	Malcolm Douglas
182	People's Building and Loan Association of London	London	Wm. Spittal
186	Peterborough Workingmen's Building and Savings Society	Peterborough	J. Corkery
231	Provident Investment Company	Toronto	E. R. Wood
121	Real Estate Loan Company of Canada (Limited)	"	E. L. Morton
214	Reliance Loan and Savings Company of Ontario	"	John Blacklock
124	Royal Loan and Savings Company	Brantford	W. G. Helliker
	Royal Trust Company (c)	Montreal	Angus Kirkland (Toronto)
	Scottish American Investment Company (Limited) (d)	Toronto	*W. H. Lockhart-Gordon ..
234	Scottish Ontario and Manitoba Land Company (Limited), Glasgow	"	*Mowat, Langton & Mac- lennan
127	Security Loan and Savings Company	St. Catharines	Eugene F. Dwyer
136	Simcoe Loan and Savings Company	Barrie	O. H. Lyon
130	Southern Loan and Savings Company	St. Thomas	Jno. Walker Stewart
133	Standard Loan Company	Toronto	W. S. Dinnick
189	Stratford Building and Saving Society	Stratford	D. B. Burritt
219	Sun and Hastings Savings and Loan Company of Ontario	Toronto	W. Pemberton Page
267	Toronto General Trusts Corporation	"	J. W. Langmuir
237	Toronto Land and Investment Corporation	"	W. M. Wallace
139	Toronto Mortgage Company	"	Walter Gillespie
240	Toronto Savings and Loan Company	Peterborough	W. G. Morrow
143	Trust and Loan Company of Canada, London, Eng. (c)	Toronto	*James O'Neill Ireland
263	Trusts and Guarantee Company (Limited)	"	T. P. Coffee
272	Union Trust Company (Limited) The	"	Hon. Geo. E. Foster
147	Victoria Loan and Savings Company	Lindsay	James Low
243	Walkerville Land and Building Company (Limited)	Walkerville	D. F. Matthew
194	York County Loan and Savings Company	Toronto	V. Robin

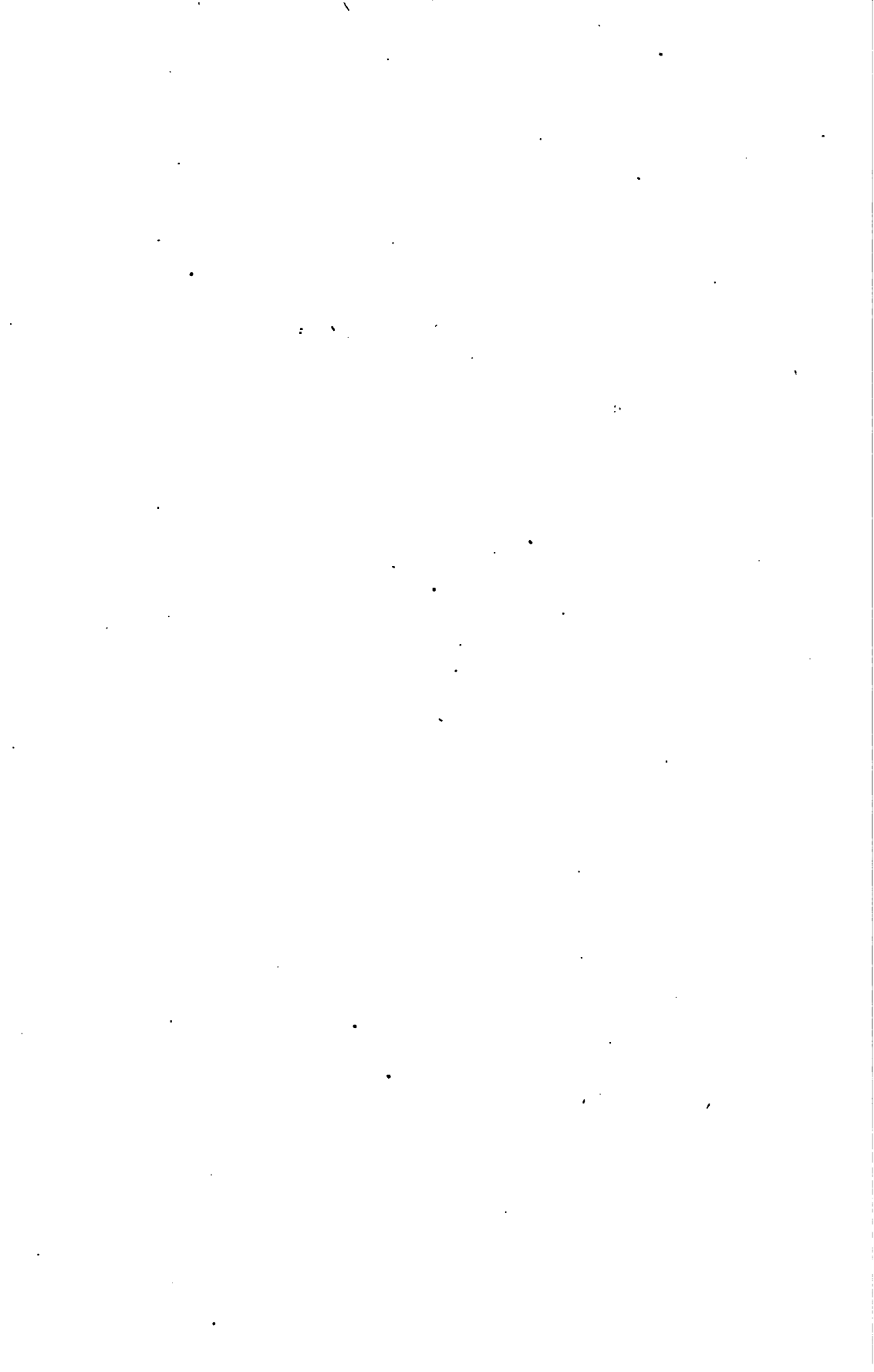
(c) The Royal Trust Company (2 Edward VII., c. 103, Ont.) was registered under R.S.O., 1897, c. 205, to carry on in Ontario the business of a Trust Company as from the 1st January, 1905.

CORPORATIONS.

President.	Description of Company.	When incorporated.	Financial statement for year ending
Robert Jaffray	Loaning Land Co.	29th March, 1873	31st December, 1904.
Geo. R. R. Cockburn, M.A.	Loan Co.	1863	"
R. W. Puddicombe.	"	2nd May, 1877	"
G. C. Gibbons, K.C.	Trusts Co.	17th September, 1896	"
John Mulligan	Loan Co.	5th July, 1872	"
J. W. Flavelle	Trusts Co.	12th August, 1898	"
R. P. Salter	Local Loan Co.	5th March, 1894	"
Hugh Wright	Loan Co.	14th October, 1876	"
James W. Barclay	"	17th December, 1875	11th November,
C. V. Price	"	26th June, 1874	31st December,
John McClary	"	26th September, 1870	"
W. F. Cowan	"	12th February, 1873	"
A. J. Spencer	"	1st April, 1889	"
James White	"	27th October, 1865	"
Judge Elliott	"	22nd June, 1892	"
T. B. McGrath	"	17th January, 1889	"
Hon. Geo. A. Cox	Loaning Land Co.	3rd November, 1893	"
William Cooke	Loan Co.	17th September, 1879	"
Hon. John Dryden.	"	2nd March, 1893	"
James W. Digby, M.D., C.M.	"	24th March, 1876	"
Lord Strathcona and Mount Royal. G.C.M.G.	Trusts Co.	24th June, 1892	"
Hugh Wright	Loaning Land Co.	15th December, 1879	"
Thomas R. Merritt.	Loan Co.	12th March, 1870	"
J. H. Plummer.	"	18th April 1896	"
Wm. Mickleborough	"	24th November, 1903	"
Alexander Sutherland, D.D.	"	14th February, 1873	"
Wm. Davidson	"	23rd August, 1889	"
Whitford Vandusen	"	3rd May, 1893	"
John Hoskin, K.C.	Trusts Co.	1st April, 1899	"
Geo. R. R. Cockburn	Loaning Land Co.	30th January, 1886	"
Hon. Wm. Mortimer Clark, L.L.D., W.S., K.C.	Loan Co.	15th December, 1899	"
Hon. Geo. A. Cox	Loaning Land Co.	15th June, 1885	"
Charles Morrison	Loan Co.	9th December, 1843	30th September,
Hon. J. R. Stratton	Trusts Co.	24th February, 1897	31st December,
Oronhyatekha, M.D.	"	7th August 1901	"
W. Flavelle	Loan Co.	4th September, 1895	"
E. Chandler Walker	Loaning Land Co.	22nd October, 1890	"
Joseph Phillips.	Loan Co.	21st December, 1891	"

(d) Scottish American Investment Company, Limited. This Company is withdrawing from business in Ontario, and for this purpose is registered under 1 Edward VII., chap. 12, sec. 18, as amended by 5 Edward VII., chap. 13, sec. 17. The sworn statement of the Chief Agent for Ontario for the year ending 31st December, 1904, shows the assets of the Company then in Ontario at \$174,353.67, consisting of mortgage and sale agreements.

(e) Trust and Loan Company of Canada. This Company is withdrawing from business in Ontario, and for this purpose is registered under 1 Edward VII., chap. 12, sec. 18, as amended by 5 Edward VII., chap. 13, sec. 17.





APPENDIX TO REPORT (1905)

OF THE

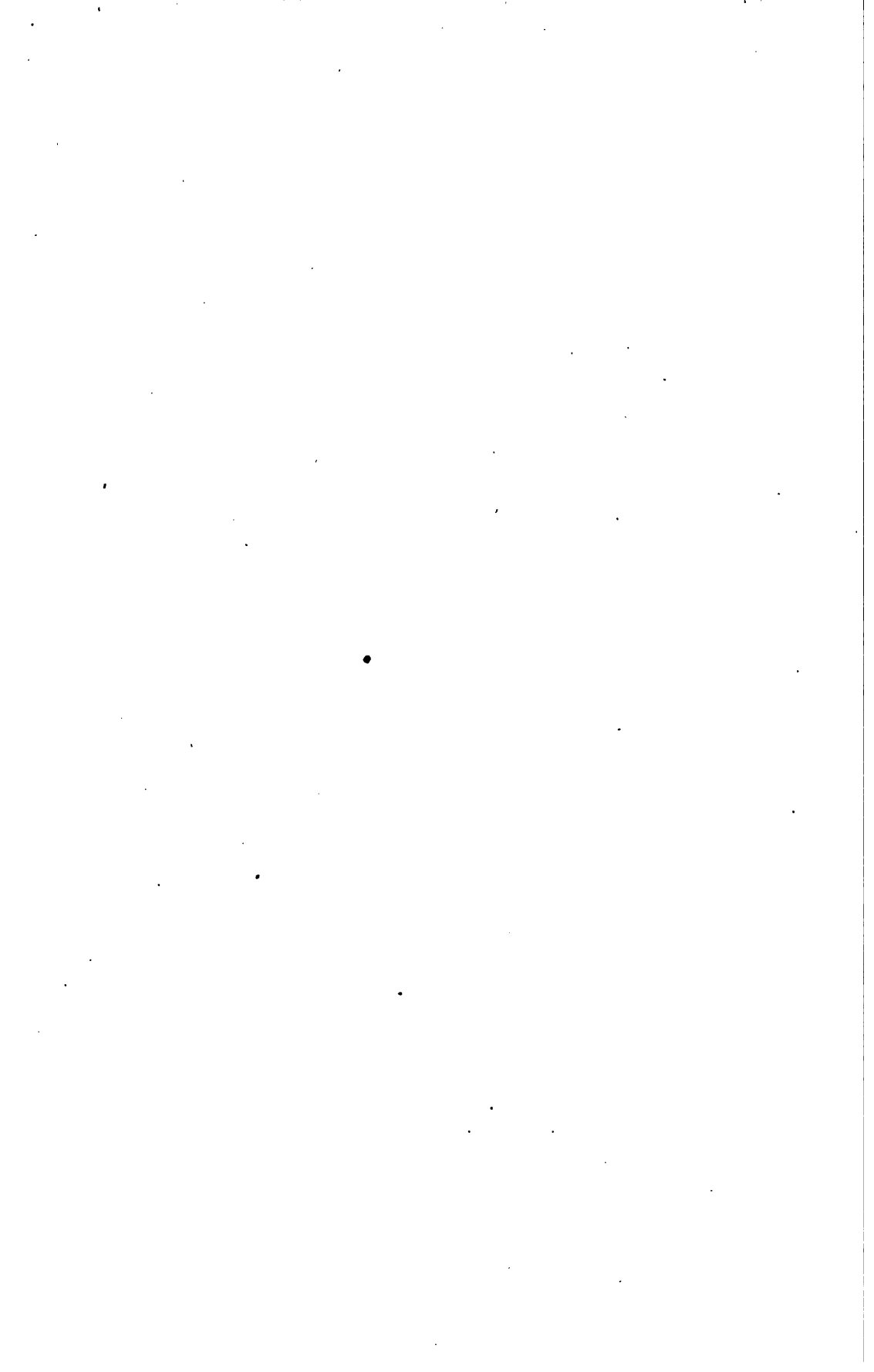
REGISTRAR OF LOAN CORPORATIONS.

I. Recent Proceedings Under the Penal Clauses of The Loan Corporations Act
R.S.O., 1897, c. 205, s. 117.—“Diamond-Leases.”

II. “Credit Companies.”

III. “Bond-Investment” Schemes.

IV. “Home-Building” Schemes.



APPENDIX TO REPORT (1905)

OF THE

REGISTRAR OF LOAN CORPORATIONS

I.

RECENT PROCEEDINGS UNDER THE PENAL CLAUSES (SECTION 117) OF THE LOAN CORPORATIONS ACT.

Section 117 of The Loan Corporations Act, R. S. O. 1897, chapter 205, as amended by subsequent Acts, (including the Act of 1904, 4 Edward VII., chapter 17), enacts as follows:—

117.—(1) After the 31st day of December, 1897, no incorporated body or persons acting in its behalf, other than a corporation standing registered under this Act, and persons duly authorized by such registered corporation to act in its behalf, shall undertake or transact the business of a loan corporation in the Province, as such business is described in clause 5 of section 2 of this Act. In the case of any loan corporation whatsoever any setting up or exhibiting of a sign or inscription containing the name of the corporation, or any distribution or publication of any proposal, circular, card, advertisement, printed form or like document in the name of the corporation, or any written or oral solicitation in the corporation's behalf, or any collecting or taking of money on account of shares or of loans or advances shall, both as to the corporation and as to the person acting or purporting to act in its behalf, be deemed undertaking the business of a loan corporation within the meaning of this section.

No unregistered corporation to undertake the business of a loan corporation.

(2) If any promoter, organizer, office-bearer, manager, director, officer, collector, agent, employee, or person whatsoever, undertakes or transacts the business of a loan corporation which does not stand registered under this Act, he shall be guilty of an offence, and upon summary conviction thereof before any Police or Stipendiary Magistrate or two Justices of the Peace having jurisdiction where the offence was committed, shall be liable to a penalty

No person to act as agent for unregistered loan corporation.

Penalty. not exceeding \$200 and costs, and not less than \$20 and costs; and in default of payment the offender shall be imprisoned with or without hard labour for a term not exceeding three months, and not less than one month; and on a second or any subsequent conviction he shall be imprisoned with hard labor for a term not exceeding twelve months, and not less than three months.

(a) Any person, partnership, organization, society, association, company or corporation, not being a corporation registered under this Act or under *The Ontario Insurance Act*, that assumes or uses in the Province a name which includes any of the words "Loan," "Mortgage," "Trust," "Trusts," "Investment," or "Guarantee" in combination or connection with any of the words "Corporation," "Company," "Association" or "Society," or in combination or connection with any similar collective term, or that assumes or uses in the Province any similar name, or any name or combination of names which is likely to deceive or mislead the public, shall be guilty of an offence against subsection 1 of this section; and any person acting in behalf of such person, partnership, organization, society, association, company or corporation shall be guilty of an offence against subsection 2 of this section, and upon conviction thereof shall be liable as in the said subsection 2 enacted, and subsections 3, 4, 5 and 6 of this section shall apply. This provision shall take effect on, from and after the first day of July, A. D. 1900. Provided that, where any of the said combinations of words formed part of the corporate name of any corporation theretofore duly incorporated by or under the authority of an Act of the Province or of the Parliament of Canada, the said combination may continue to be used in the Province as part of the said corporate name.

63 Vic. (1900)
chap., 27 sec. 12.

Penalty for
using certain
word, in name
of company
while unregis-
tered.

3 Edw. VII.
(1903) chap. 16,
sec. 9.

4 Edw. VII.
(1901) chap 17,
sec. 4.

(b) In this clause lettered (b):

Interpretation:
"Considera-
tion."

"Consideration" means any consideration which includes an entrance or membership fee, or expense contribution, initial, renewal, periodical, or recurrent, or which includes any periodical, or recurrent contribution to a fund, or account, or source, for or intended or alleged to be for, the carrying out of any such contract as in this clause defined;

"Contract" means and includes any contract, agreement, undertaking or promise upon such consideration

(i) To pay to or for the contract-holder any money or money's worth;

- (ii) To sell, supply or procure any building or site or land or to bring about the purchase and sale or supply thereof; or
- (iii) To construct or procure the construction of any house or building.

And "contract" further includes any contract, agreement, undertaking, or promise, the benefit of which to the contract-holder paying such consideration is to be wholly or partly postponed or deferred until other contract-holders have been provided for, or is to depend upon the number or the persistence of the other contract-holders, or upon the accession of new contract-holders, or upon the order or sequence of the contract.

Any person, partnership, organization, society, association, company or corporation, not being a corporation registered under this Act, or under *The Ontario Insurance Act*, that undertakes or effects, or offers to undertake or effect any such contract shall be guilty of an offence against subsection 1 of this section; and any person acting in behalf of such person, partnership, organization, society, association, company or corporation, shall be guilty of an offence against subsection 2 of this section, and upon conviction thereof shall be liable to the same penalty as in the said subsection 2 enacted; and subsections 3, 4, 5 and 6 of this section shall apply; also after any conviction the magistrate or justices mentioned in subsection 2 of this section, may thereupon or thereafter make such order for the restitution of the moneys which were unlawfully taken, as shall to him or them seem just, together with costs; and in default of compliance with the said order, the said magistrate or justices shall have authority to commit the offender to the common gaol or to the Central Prison for a term not exceeding twelve months.

Breach of clause (b).

Rev. Stat., chap. 203.

Penalty.

Order for restitution of moneys taken.

Penalty for non-compliance with said order.

(c) In this clause lettered (c), "Lender" means and includes any person, partnership, organization, society, association, company, or corporation whatsoever, that advances or lends money; and "Cost of the Loan" means the whole cost of the loan to the borrower, and *inter alia* includes interest, discount, subscription, premium, dues, bonus, commission, brokerage, fees and charges; but does not include actual disbursements (being lawful and necessary) made to a Registrar of Deeds, a Master or Local Master of Titles, a Clerk of a County Court, a Sheriff, or a Treasurer of a Municipality.

4 Edw. VII. (1904) chap. 17, sec. 4. Interpretation: "Lender."

"Cost of the loan."

Where loan induced by misrepresentation, etc., and cost of loan exceeds ten per cent. per annum

Order reforming loan.

Order to carry costs.

4 Edw. VII. (1904) chap. 17, sec. 4.

Use of sign, name or document inducing breach of section, etc., order for discontinuance.

Penalty.

Informant.

In any loan of money not exceeding \$200, where the cost of the loan calculated as a percentage per annum on the money actually received by the borrower and for the actual time during which the borrower has had or is to have the use of the money, exceeds ten per centum per annum, if, on a complaint or information, (which may be laid as provided in this section) it has been made to appear to the magistrate or justices that the borrower has been induced to enter into the contract by misrepresentation, or by concealment, suppression or omission of any material fact or term (including *inter alia*, the amount of principal advanced and the rate per centum per annum of interest charged) the magistrate or justices may summarily order that the loan shall be dischargeable by paying or tendering to the lender, or his agent, within the time limited by the order, such sum or sums (to be stated in the order) as were actually received by the borrower (less such sum or sums repaid by or standing to the credit of the borrower) together with simple interest thereon calculated at the legal rate of interest on such sum or sums of principal for the actual time or times during which the borrower has had the use thereof; and such order shall carry costs as against the lender. Upon payment or tender made of the amount directed by the order, the lender shall forthwith do all things and execute all instruments proper for the discharge, assignment, reassignment, transfer, release or surrender of the securities taken for the loan; and in default of his doing so he shall be liable to the same penalty or penalties as mentioned in subsection 2 of this section; and to any action or proceeding against the borrower on the contract of loan, or on the securities, it shall be sufficient for the borrower to plead the said order.

(d) Where in any case arising under this section it is found by the magistrate or justices that the person charged or his agent is exhibiting or using any sign, inscription or name, or distributing, using or publishing any document (including any proposal, circular, card, advertisement, notice, application, contract or printed form), which, in the opinion of the magistrate or justices, induces, or tends to induce a violation of this section or is likely to deceive or mislead the public either as to the party, or the status of the party undertaking the contract, or as to the nature, terms or effect of the contract, the magistrate or justices may summarily order the discontinuance of such sign, inscription, name or document; and in case of non-compliance with the said order the offender shall be liable to the penalty mentioned in subsection 2 of this section, and subsections 3, 4, 5 and 6 of this section shall apply.

(3) Anyone may be prosecutor or complainant under this Act; and one-half of any fine imposed by virtue of this

Act shall, when received, belong to Her Majesty, for the use of the province, and the other half shall belong to the prosecutor or complainant. ^{Application of fine.}

(4) Any person convicted under this Act who gives notice of appeal against the decision shall be required before being released from custody to give to the magistrate or justices satisfactory security for the amount of the penalty, and the costs of conviction and appeal; and the appeal shall be to a Divisional Court of the High Court. ^{Appeal.}

(5) In any trial or cause or proceeding under this Act the burden of proving registry shall be upon the corporation or person charged. ^{Burden of proof.}

(6) All informations or complaints for the prosecution of offences under this Act shall be laid or made in writing within one year after the commission of the offence. ^{Limitations of prosecutions.}

PROCEEDINGS (1904) TAKEN UNDER THE ABOVE SECTION AGAINST THE PREFERRED MERCANTILE COMPANY, OF BOSTON, MASS.—*Rex v. Pierce* (Toronto); *Rex v. Burrows* (Hamilton); *Rex v. Claxton* (Kingston).

This Company dealt in contracts that it called "Diamond Leases." The object of the Company was "explained" in its "March Statement, 1904," as follows:

"Our object is to furnish a co-operative plan which attains to equity in every particular, embodying the fundamental principles of life insurance and co-operative enterprises, and assuming the obligations which many years of practical experience has demonstrated to be feasible in maturing our leases, according to the terms thereof.

"The plan is based upon the actual experience of all successful life insurance companies, covering a period of over two hundred years (the same principles governing both)."

A prospectus of the Company, circulated in the Province of Ontario in 1904, gave the following additional explanations:

"The Preferred Mercantile Company is an association of persons banded together, each contributing a stipulated amount in weekly or monthly premiums, and agreeing, upon the happening of a certain contingency, that a portion of such weekly or monthly contribution shall be used toward paying a large profit to those selected by the happening of a chosen contingency.

"The oldest outstanding lease in each separate series, governed by lapses, and assessments, based on the death rate of insurance, is the contingency chosen by the Preferred Mercantile Company for determining the ones paid for the end of the agreed period."

As to the collection and application of the monthly premiums, the same prospectus gave the following explanations:

"When the Preferred Mercantile Company collect their weekly or monthly premium, it is divided into three funds: 1st, the Redemption fund, which is for the purpose of redeeming the leases that are reached (or die) each week; 2nd, the Contingent fund, which is to guarantee the payment of the lease, should it run 110 weeks; 3rd, the Expense fund, to meet the running expenses of the Company."

"The lapses, accumulation of new members, interest from transfer fees and assessments on delinquent leaseholders of The Preferred Mercantile Company guarantee the final payment of the leases."

"For illustration, The Preferred Mercantile Company collects on an average, from those who live during the endowment period, \$110.00 on each and every lease. Of this amount \$83.00 is placed in the Maturity Fund to pay living claims which in life insurance corresponds to the Mortality fund, to pay death claims; a life insurance company would use of each premium of \$110.00 at the age of 40, about \$45.00, a mite over one-half the amount employed by The Preferred Mercantile Company in discharging its obligations."

"On the plan of The Preferred Mercantile Company the oldest outstanding leases in each series are paid first. Each and every leaseholder contributes exactly the same amount per lease, and receives the same remuneration for the same number of weeks that the lease runs."

"The Preferred Mercantile Company assumes to pay living members who carry their leases to completion, at sometime during the endowment period of their leases, \$200.00 in diamonds or \$160.00 for \$110.00 paid in. Our resources for paying this large profit are greater than the resources of an insurance company for paying their large profits to the estates of the dead; namely, the continual payment of premiums on leases in force, together with the earnings of lapses, and whatever additional is earned from fines and transfers."

"Representatives are authorized to collect the first five weekly instalments only, until you are authorized to pay them further from

the home office in Boston. All weekly instalments (exclusive of the first five) must be paid according to instructions sent you. For the benefit of those who do not wish to pay weekly, the Company will accept five instalments in advance at any one time.

"The Company guarantees and warrants all diamonds to be of the value of \$100.00 per carat.

"The Company will from time to time issue a report giving general information of business done.

"The Company agrees to find a purchaser for your diamond at the rate of \$80.00 per carat."

* * * *

"New business is as necessary to the healthy diamond lease company as daily food to a human being. In a mutual company like ours, the present lease-holder profits by the incoming leaseholder, and the incoming leaseholder in turn profits by the continual increase in membership. Our field force is a vast and growing machine of untold power for good, capable of wonderfully increasing results under pressure."

The following is a form of "Diamond Lease" undertaken by the Company in the Province of Ontario:

"UNITED STATES OF AMERICA.

"Series.....

Number.....

Incorporated under the Laws of Massachusetts.

Authorized Capital Stock, \$100,000.00.

The Preferred Mercantile Co., Boston, Massachusetts.

DIAMOND LEASE.

"This lease is one of a series of like leases embracing all the series and all the leases previously written.

"KNOW ALL MEN BY THESE PRESENTS, that if.....the holder hereof, shall first well and truly make each and all the payments herein provided for, to be made by the holder hereof, at the times and in the manner herein specified, time manner, and the amount of payment being of the essence hereof, The Preferred Mercantile Company, of Boston, Mass., will deliver to the holder hereof, or estate, under and according to the terms and conditions and in the manner and order hereinafter set forth, commercial, white, clear and flawless diamonds at the rate and value of one hundred (\$100.00) dollars per carat retail, as set forth in the maturity table on the back hereof, and made a part of this lease.

"The holder hereof promises and agrees to pay to the Company, at its home office in the City of Boston, Mass., the full sum of one hundred and ten dollars (\$110.00) in the following manner to wit: one dollar (\$1.00) on the delivery hereof, the receipt of which is hereby acknowledged, and a weekly instalment of one dollar (\$1.00) per week, on or before the last day of each calendar week following the date hereof, until the sum of one hundred and ten dollars (\$110.00) is paid, unless this lease is redeemed prior to that period. If the holder hereof shall fail to pay any of the said instalments within the week in which it is payable, the said delinquent in-

stalment, together with the additional sum of twenty-five cents (\$0.25) for each week in default, may be paid at any time before the end of the next succeeding fifth calendar week; but if the holder hereof shall fail or neglect to pay any of the said weekly instalments at the time and in the manner herein provided, and shall continue in such default for more than five consecutive weeks then, and in that event, this lease shall, because of said default, become and be wholly null and void, and all the payments theretofore made hereon shall be forfeited as liquidated damages.

"The weekly instalments having been paid hereon to and inclusive of one hundred and ten (\$110.00) dollars, this lease shall be deemed fully paid up and non-forfeitable, and the holder shall be entitled to receive the diamonds herein described, provided, however, that if at such time the amount in the hands of the Company to the credit of this lease is not equal to the sum of two hundred (\$200.00) dollars, as heretofore provided, then the diamonds shall not be delivered until the amount to the credit hereof shall equal that sum.

"The Company shall employ of each weekly instalment paid in on this and other leases, of the series to which this lease belongs, and the leases of the last previously written series (exclusive of the first five), seventy cents (0.70) together with the lapses, fines and transfer fees accruing thereunder, in the purchase and delivery of the diamonds required for the performance of such leases, ten cents (0.10) shall constitute a contingent fund to be used exclusively and paid out weekly in the performance of the oldest outstanding, unredeemed leases, of the oldest unredeemed series; and twenty cents (20c.) together with the difference between the retail value of said diamonds and the wholesale price or the amount actually paid or expended in the performance of said lease, to defray the cost of managing the business.

"This lease is transferable, but no transfer will be recognized by the Company unless first registered by the Company, for which registration a fee of one dollar (\$1.00) shall be charged.

"THE HOLDER OF THIS LEASE WILL BE ENTITLED TO THE BENEFITS HEREINAFTER SPECIFIED.

"First. The Company reserves the right to call in and redeem this lease at any time prior to the final maturity period.

"Second. When this lease is called in and redeemed, all instalments thereon shall cease, and the holder hereof agrees to deliver up this lease for redemption at any time upon demand of the Company when reached in the order of redemption.

"Third. The Company agrees to call in and redeem as many of the oldest, outstanding, unredeemed leases of this, and the leases of the last previously written series, as the funds will permit each week, (applying equally to the redemption thereof one-half of the maturity fund to each series), by the delivery of a commercial white, clear and flawless diamond of the proper weight and value for the week in which the redemption occurs as shown in the maturity table endorsed on the back hereof, and made a part of the lease.

"Fourth. The lapses, fines and transfer fees of each series shall apply solely to the series in which they occur.

"The payments of this lease are payable as designated in a letter of instruction sent with lease unless the holder is otherwise notified. No

further notice of payments falling due will be given, neither is it permitted for collectors to make personal calls to collect.

IN WITNESS WHEREOF, The Preferred Mercantile Company has caused this lease to be signed by the President and Secretary, and its corporate seal to be hereto attached this day of A.D. 190.....

(Signed GUY C. STILLINGS,
[Seal] Secretary.

(Signed) G. E. STILLINGS,
President."

REX V. PIERCE.

Under the above cited section 117 of The Loan Corporations Act an information was (18th May, 1904), laid at Toronto against H. L. Pierce and L. D. Rankin for having as agents of the Preferred Mercantile Company, of Boston, entered into a contract contrary to the provisions of that section. The case was tried at Toronto before Colonel Denison, Police Magistrate, and, on conviction, the defendants were each fined \$25 and costs, or thirty days' imprisonment. Also, under clause (d) of sub-section 2, the Magistrate made an Order requiring, as from the date thereof, the Company, its officers, servants and agents to discontinue in the City of Toronto and in the County of York the distribution, use or publication of any such documents as certain exhibits which had been proved in evidence.

Under subsection 4 of that section the defendants took an appeal to the Divisional Court of the High Court.

E. F. B. Johnston, K. C., and J. M. Godfrey, for appellants.

J. R. Cartwright, K.C., for the Attorney-General.

J. W. Curry, K.C., for the private prosecutor.

Judgment (9 O. L. R., 374) was delivered on the 18th November, 1904, dismissing the appeal with costs.

Referring to The Loan Corporations Act, R. S. O. 1897, c. 205, as amended by 63 Vict., ch. 27, sec. 12, and 4 Edw. VII., ch. 17, sec. 4, the Court (Meredith, C. J., Maclaren, J. A., and MacMahon, J.), held that the contracts referred to in clause (b) of 4 Edw. VII., ch. 17, sec. 4, are not restricted to such contracts as are mentioned in subsec. 5 of sec. 2 of R. S. O. 1897, ch. 205.

Held, also, that, as the effect of clause (b) is to prohibit the making of such contracts as are dealt with by that clause under the penalty therein mentioned, the enactment is *intra vires* the Provincial Legislature.

On this latter point the Court said:

"There remains to be considered the question as to the constitutionality of the enactment.

"It was contended by counsel for the appellants, that the legislation is, in form as well as in substance, criminal law, but it was conceded that, if the effect of clause (b) is to prohibit the making of such contracts as it deals with under the penalty which it imposes, the enactment is *intra vires* the Provincial Legislature.

"That such is the effect of the enactment is not, I think, open to doubt.

"It was said by Lord Hatherley in *In Re Cork and Youghal Ry. Co.* (1869), 4 Ch. App. 748, at page 758, that everything in respect of which a penalty is imposed by statute, must be taken to be a thing forbidden, and absolutely void to all intents and purposes whatsoever; and

that, he states, to be the view taken by the learned judges in *Chambers v. The Manchester and Milford Ry. Co.* (1864), 5 B. & S., 588. That a penalty implies a prohibition is stated in *Pangborn v. Westlake*, (1873), 36 Iowa, 546, at p. 549, to be the general rule, and that was also the view taken by the Supreme Court of the United States in *Miller v. Ammon*, (1891), 145 U. S., 421 at p. 426.

"If it be necessary to the validity of the enactment that it be construed as prohibiting that, for the doing of which a penalty is imposed, that construction, upon well-understood principles, should be given to it if the language used at all warrants that being done."

The defendants then applied to the Court of Appeal for leave to appeal to that Court from the Order of the Divisional Court:

E. F. B. Johnston, K.C., and J. M. Godfrey, for defendants.

J. R. Cartwright K.C., for the Attorney-General; J. W. Curry, K.C., for the private prosecutor.

Judgment (5 O. W. R., 464) was delivered by the Court of Appeal on the 17th March, 1905, dismissing the application.

JUDGMENT OF COURT OF APPEAL.

C. A.	}	17th March, 1905.
Rex		
v.		
Pierce & Rankin		

Moss, C. J. O.,: "This is an application on behalf of the defendants for leave to appeal from a judgment of a Divisional Court affirming a conviction of the defendants by the Police Magistrate of the City of Toronto upon an appeal to that Court under the provisions of R. S. O., ch. 205, sec. 117 (4).

"The defendants contend that an appeal now lies to this Court by virtue of the Act 4 Edw. VII., ch. II, amending *The Judicature Act*. If that Act has conferred a right of appeal, which formerly did not exist in cases of this kind, it must be by reason of the provisions of secs. 50 and 75 of *The Judicature Act* as enacted by sec. 2 of the amending Act.

"Section 50 (1) deals with the jurisdiction of the Court of Appeal to hear and determine appeals from a Divisional Court. It provides that 'the Court of Appeal shall have jurisdiction and power to hear and determine appeals from any judgment, order or decision save as in this Act mentioned of a Divisional Court of the High Court subject to the provisions of this Act and to such rules and orders of the Court for regulating the terms and conditions on which appeals shall be allowed as are now in force or may be made pursuant to this Act.' Sec. 75 provides that 'the judgment, order or decision of a Divisional Court shall be final, and there shall be no further appeal therefrom save only at the instance of the Crown in a case in which the Crown is concerned and save as provided in sections 50 and 76.'

"The effect of these two provisions is that there is to be no further appeal by a subject from any judgment, order or decision of a Divisional Court unless the right to such appeal is to be found either in sec. 50 or in sec. 76. The jurisdiction conferred by sec. 50 (1) is to hear and determine appeals from Divisional Court judgments, orders, or decisions save as in this Act mentioned,' that is, the Court is to have jurisdiction except in

respect of any judgments, orders or decisions that may be mentioned. If any are mentioned as excepted then there is no jurisdiction in respect of them. Otherwise there is jurisdiction but the exercise of the jurisdiction is subject to the provisions of the Act.

"Then comes the declaration in sec. 75 that there shall be no further appeal from the judgment, order or decision of a Divisional Court save at the instance of the Crown and as provided by sections 50 and 76.

"Turning then to sec. 50 (1) we do not find that it provides or gives a right of appeal in any case. It does not point to any case in which the judgment, order or decision of the Divisional Court is not final and in which there may be a further appeal. Full effect is given to its provisions by holding that it confers jurisdiction to hear and determine appeals where the right of appeal exists under the Act. Sub-sec. (2) is but a continuation of the jurisdiction already vested in the Court by the various Statutes there specified. But it supplies instances to which the language of sec. 75 'save as provided in sections 50 and 76' is applicable.

"In some of the cases mentioned the appeal is or may be from a Divisional Court, e.g. under R. S. O., ch. 83, R. S. O. ch. 91, R. S. O., ch. 153, and R.S.O., ch. 245. Nevertheless no new jurisdiction is conferred and no new right of appeal is given. Looking at the whole section nothing is to be found creating or conferring either expressly or by inference a right of appeal in any case in which there was not such a right before the enactment.

"It is not disputed that before the enactment in question no appeal lay to the Court of Appeal in a case like the present. And, if its provisions are applicable at all, sec. 75 distinctly shuts out an appeal on the part of the defendants, nothing to save it being found either in sec. 50 or in sec. 76.

"The application should be refused."

MacLennan, Garrow, and Maclaren, JJ. A., concurred.

Osler, J. A.,: "I think this case raises a question of considerable importance on the point of jurisdiction and also on that of the proper construction or meaning of the applied section of The Loan Corporations Act. If leave be necessary I think it should be granted for the purpose of discussing both."

The foregoing scheme of The Preferred Mercantile Company, like many other recent speculations, wrests to its own purpose and misapplies the machinery characteristic of terminating shares in Building Societies, though the names of things are somewhat disguised. The "lease" answers to the certificate of terminating shares; and as those shares have their "maturity" period and value, so have the "leases." The "lease-holder" is the terminating shareholder, without, however, the latter's membership rights, e. g., the right to elect directors and to hold them to an account. As in the terminating shares of Building Societies, the monthly instalment is divided among certain funds, viz., an Expense Fund, a Contingent Fund, and a Redemption Fund, the last answering to the Loan Fund of terminating share Societies; R.S.O., 189, c. 205, s. 12, Sched. A (8).

The Attorney-General's Department of the United States advised the Postmaster-General of the United States (December 7th, 1900,) as to the use of the mails in the promotion of certain schemes. and gave the following opinion:—

"A scheme or plan of business which is promoted by means of promises which cannot be fulfilled, and by representations, pretenses, or suggestions, or calculations tending to demonstrate that the promises made can be met, when in fact the person making such promises, etc., could, by proper inquiry and investigation, which he was bound to make, have

readily ascertained that it would be impossible to carry out the same, and that such representations, suggestions and calculations were untrue and misleading, *is so far as the question as to the use of the mails in the promotion thereof is concerned, a scheme or device to defraud by means of false and fraudulent pretenses, representations and promises.*"

Page 25 of document entitled "Opinion addressed to the Postmaster-General as to the Use of the Mails in the promotion of certain so-called Bond-Investment Schemes."—Washington Government Printing Office, 1900.

In this document, among the schemes examined and held by the Attorney-General's Department to fall within the above description, are two Diamond Contracts (pages 92, 107); of which the first generally resembles, and in passages is identical with, the above cited Diamond Lease of the Preferred Mercantile Company.

II.

"CREDIT COMPANIES."

Diamonds have become favorite bait with these fishers of men. For the alleged purpose of enabling subscribers to obtain diamonds, jewellery, watches, furs, etc., by means of weekly payments, a number of so-called "Credit Companies" were launched in 1903 under the Companies Act of Canada, and were operated from Montreal. To the subscribers ("contract-holders") the Credit Company offered the alternative either of receiving back their instalments with enormous interest (100 to 700 per cent. per annum) or of receiving the equivalent in the form of diamonds, jewellery, etc. In 1904, that is within a twelve-month of their incorporation, came a general collapse of these companies, with severe loss to the industrial classes, who had been strongly attracted by those schemes.

The matter was brought to the attention of the Canadian House of Commons on the 25th April, 1904, by Mr. L. Demers (St. John and Iberville)—Hansard, H. C., April 25th, 1904, page 1882. These companies seem (on the *lucus a non lucendo* principle,) to have been named "Credit Companies," for the reason that they did not grant credit to anyone. After referring to this misnomer, Mr. Demers said:—

"To the person who deposits with them two dollars a week for fifteen weeks, that is \$30 altogether, they agree to pay \$75. Deposits may be continued for a term of 150 weeks, or three consecutive years, if desired. After having thus deposited \$300, the depositor under the agreement will be entitled to \$750. The same rule applies to all subscribers; there is no drawing of lots; every depositor has the promise that he will receive 150 per cent. on his investment."

Form of Contract used by the Credit Company of Canada, Limited, which suspended payment 29th April, 1904.

[TRANSLATION.]

Contract No

Class M.

"THE CREDIT COMPANY OF CANADA, LIMITED.

"Incorporated by the Government of the Dominion of Canada.
Imperial Building, Montreal.

Object of the Company.

"The Credit Company of Canada, Limited, has for its object to facilitate for its contract-holders the purchase of all articles of utility or luxury, such as clothes, jewellery, musical instruments, furniture, carpets, books, etc., etc.

CONDITIONS.

"The Credit Company of Canada, Limited, collects from its contract-holder upon this contract of Class M, the sum of \$4 per week; at the end of FIFTEEN WEEKS, and from week to week the Company commences the delivery of the goods, or proceeds to the redemption of the contracts, at the option of the contract-holder, according to the numerical order of the call of the contract.

"This Contract is divisible into two parts, that is to say, the contract-holder has the option of halving the profits, by making half-payments (say \$2 per week), but in that case it is clearly understood that his credit and the proportion of the redemption-moneys will be only one-half of the sums mentioned in the redemption table.

"2. Every contract-holder who has regularly made his payments shall be entitled to the benefit of such delivery of goods or of such redemption according to the numerical order of the call of his contract.

"3. It is clearly understood that the redemption of the contract can be demanded by the contract-holder only after he shall have been announced by the Company as entitled to benefit, according to a rotation fixed from time to time by the Company in its weekly bulletins.

"4. Every contract-holder who shall cease to make his weekly payments regularly to the office of the Company shall forfeit his right to share in the profits, and the moneys previously paid by him shall belong to the Company, and he shall have no right of recovery.

"5. The value of the various goods which are to be delivered to a contract-holder shall be not less than two-thirds of the total of the subscriptions paid by him up to the day of the delivery of the goods, or of the redemption of his contract.

"6. The Company guarantees the contract-holders and covenants with them to commence the delivery of the goods or to proceed to the redemption of the contracts between the fifteenth and the one hundred and fiftieth weekly payments, every contract, in any event, before being redeemed by the Company to be subject to the conditions hereinbefore stipulated.

"7. This contract shall be transferable to the said Company only.

Having notice of the conditions of the Credit Company of Canada, Limited, I covenant to execute a contract of Class M.

.....
Contract-holder.

.....
Manager.

III.

BOND-INVESTMENT SCHEMES.

These schemes, by a most dangerous misuse of words, usually describe their contracts as "Bonds" or "Debentures", and complete the misdescription by annexing to the contracts so-called "coupons".

Now a "Bond" or "Debenture" of a corporation, in the ordinary and legitimate sense, means an instrument executed under the seal of the corporation, acknowledging a loan of money, and agreeing to repay the loan at a time or times certain, with interest, the coupons being certificates of interest, or of principal and interest, due from time to time. In a bond or debenture properly so-called, the consideration so far as the creditor or holder is concerned is *already completely executed*; he has already done all that can be required of him under the contract, and there is no outstanding liability on his part. So that if the issuing corporation is solvent, such a bond or debenture ranks as an asset of the holder,—as one of his securities.

But the holder of a "bond" or "debenture" in the bond-investment scheme acquires no such asset or security. On the contrary, he has acquired a *liability*. He has signed a paper—a stringent contract—which commits him to the payment of a stated sum every week or month, such payments to continue for a long period or even indefinitely.

He is not a member of the corporation, and has no right to attend general meetings of the corporation, or in any way whatever intervene in the administration of its affairs. By his payments to the corporation he acquires no proprietary interest in it; he is not a shareholder in any sense.

As consideration for his payments he receives the vague promise of the corporation—usually unsubstantial and irresponsible—to repay him sometime or other with extravagant and impossible interest. This fabulous interest is the bait, and attracts an amazing number of otherwise sensible people.

A TYPE OF BOND-INVESTMENT CONTRACT.

"The Company promises to pay, at its office in to, of, State of, his executors, administrators, or assigns, upon the maturity of each of the coupons hereto attached, according to the by-laws, rules, and regulations of this company, \$3.00 for \$1.00 theretofore paid by him and accepted by this company on account of said coupon.

"This contract is made in consideration of the written application for this certificate and subject to the provisions of the charter, by-laws,

rules and regulations of this company, all of which are made part of this contract; and in further consideration of the payments and subject to the conditions set forth on the back hereof.

"In witness whereof the said company has, by its duly authorized officers, signed and delivered this certificate this the day of

.....
President.

.....
Secretary.

Attached to each certificate are ten coupons, each of which is in the following form:

" No.....	Coupon.
The.....Company will pay to the owner of the certificate, of which this coupon is part, three dollars for each one dollar theretofore paid hereon.	
.....	President.
.....	Secretary."

The foregoing was one of a number of Bond-Investment Contracts on which the Department of the Attorney-General of the United States in 1900, asked the opinion of the well-known Actuary, Mr. David Parks Fackler.

Upon this contract Mr. Fackler reported as follows:—

"The certificate and by-laws of this company provide that it shall pay three dollars for each dollar received on the coupons attached to its certificates. The certificate provides that this payment shall be made upon the "maturity" of the coupons, but nowhere in either certificate or by-laws or articles of incorporation is there the slightest intimation or suggestion of the time of such maturity, and there is also no limitation as to the period during which the monthly payments shall be made. It is distinctly stated that the dues shall be paid monthly on each unredeemed coupon, and that if not paid, certificates shall become void and all money paid thereon shall be forfeited to the company. It must be added that a certain amount of grace is allowed and certificates may be reinstated within a certain period, but there is absolutely no provision for any "withdrawal value," so that, in brief, either payments must be continued indefinitely until the coupons are all redeemed, or all payments will be absolutely and entirely forfeited.

"Coupons are to be redeemed in a certain somewhat indefinitely specified order out of the "general redemption fund," which is to receive *fifty per cent.* of all the receipts *after the second month*; coupons may also be redeemed in another specified order out of the "special redemption fund," which is to receive *fifteen per cent.* of the receipts *after the first two months*. The "reserve fund" is to receive *twenty per cent.* of all the receipts after the first two months, and "with all its accretions is to be held in trust to

pay all coupons *that arrive at maturity*," but inasmuch as there is *no provision whatever for determining when coupons shall have "arrived at maturity,"* it would appear that the sole use of this "reserve fund" is shown in article twelve of the by-laws, which provides that it shall be "loaned out by the consent of the entire board."

"There is also a "surplus fund," which is to receive five per cent. of all the receipts after the first two months and to be "used or invested as the directors deem best for the interests of the company." This, of course, only makes it an adjunct to the "expense fund," which is to be ten per cent. of the entire receipts after the first two months.

"From the foregoing it appears that the contracts of the company

"(1) Are absolutely without limitation as to their continuance;

"(2) Make no allowance whatever for those who wish to be relieved from the interminable payments or cannot continue paying;

"(3) Provide for the funding and definite use of only sixty-five per cent. of the receipts after the first two months; and

"(4) Thus allow all of the dues for the first two months and twenty-five per cent. of all those of succeeding months to go into various funds labeled "reserve," "surplus," and "expense," none of which are definitely required to enure to the benefit of the certificate holders, so far as any of the provisions of the certificate show. The moneys paid in to the redemption funds are to be *immediately paid out, so that interest will not operate in connection therewith*, and though it is provided that the "reserve fund" shall be invested, it is clear that the certificate holders have no definite rights therein, and that *interest, as an investment factor, has no share in the working of the company.*

"From the above it would be clear that this company is in no proper sense of the word an investment company. Those who pay their money in and continue their payments have no assurance of any profit except such as may be derived from the forfeited payments of others.

"Assuming that the management will honestly follow the prescribed rules of redemption, the order of payments by which the fortunate certificate holders will receive three dollars for each dollar paid in is to be determined by certain contingencies which are entirely fortuitous, depending on the lapsing of older certificates, either through inability or unwillingness to continue the payment of dues.

"And as I have shown above that the funds with definite provisions will receive only sixty-five per cent. of the monthly dues *paid after two months*, which would probably be less *than sixty per cent. of the average receipts on each certificate, counting in the first two months*, the three dollars promised will have to be evolved out of each sixty cents received, on the average, so that while the management promises to give three dollars for one, it will apparently try to give five dollars for each dollar of receipts of which any definite appropriation is made (three dollars being five times sixty cents). It follows, of course, that the remaining forty per cent. of the receipts on the average may go, directly or indirectly, to agents, officers or directors, and shoreholders."—Pages 78-9 of document cited in this Appendix *supra* under Diamond Leases.

These Bond-Investment schemes have been strongly condemned by the Courts in the United States.

In the case of *United States v. McDonald* (District Court, North District of Illinois, Aug. 22, 1893) 59 Fed. Rep. 563, the question was whether using the United States Mails to distribute the literature of a particular Investment-Bond Company was an indictable offence.

GROSSCUP, District Judge, charging the jury, said:

"The whole purpose of the Company, however, seems to be to issue so-called bonds. For this purpose it maintains an office in St. Louis, and has agents throughout the country to induce people to buy these bonds. To the applicants are issued bonds of the Company, being issued in consecutive numbers from one upwards, in the exact order of the imprint chronologically, said to have been made by an electrical contrivance attached to a clock.

"For the bonds the applicant has already paid \$10, a portion of which goes to the agent as his commission, the remainder to the Company for its maintenance, and he has agreed to pay each succeeding month, for each bond purchased, \$1.25 more, the 25 cents to be retained by the Company for its maintenance, and the \$1 going into the treasury, or so-called trust fund, for the redemption of the bonds. The trust fund is also increased by certain fines imposed for deferred payments and other delinquencies. For this the applicant receives the promise of the Company, embodied in the bond, that out of the redemption fund they will respectively receive, for each bond held \$1,000, the payment to be made in the following order:—

"First, bond No. 1, then bond No. 5, then bond No. 2, then bond No. 10, and so on, the priority alternating between the unpaid bonds bearing the lowest absolute number and the unpaid bond bearing the lowest number divisible by five, one class being known as numerals and the other class known as multiples. In instances where bonds have lapsed for nonpayment of premiums, the next lowest bond takes its place. The so-called trust fund is said to be kept in the treasury, except \$100,000, which is deposited in the State of Missouri with some of the officers of that Government. It seems to be no part of the scheme to invest this money so as to enlarge the bulk by interest or other increment.

"Now, does this constitute a lottery? There is no doubt, gentlemen, upon the face of it, that it constitutes a cheat. The testimony shows that this Company has been in existence now for two years, and has had 50,023 applications. According to the constitution of its organization, it has therefore received more than half a million dollars from the \$10 preliminary fee. The testimony shows that it has paid out \$206,000 from the so-called trust fund. If it had paid out all it received, as the constitution of the Company required it to do, then it has received, as maintenance from the dues, more than \$40,000. Therefore after an experience of two years, the officers and the stockholders have received more than \$500,000, and its so-called beneficiaries have received but \$206,000. That is plunder of the public. It is said that this has been done fairly. The Court, of course, is not sitting here to pass upon the fairness of any such transaction. Two hundred years ago, when coaches were robbed by highwaymen on the heaths of London, it was always said that the highwaymen acted with courtesy, but nobody but an ignorant fool returned to London without knowing he had been plundered. But that does not prove that it was a lottery. It may be a cheat, but we must ascertain by the legal canons and definitions whether it is a lottery. What is a lottery? The best definition I can find for it is this: Where a pecuniary consideration is paid, and it is determined by chance or lot, according to a scheme held out to the public, whether he who pays the money is to have anything for it, and, if so, how much, that is a lottery. You will see, therefore, that the elements of this definition are two: First, that the party who pays

the pecuniary consideration must have a return—a prize; second, that that return or prize is determinable by lot or chance.

“Now, every enterprise in which we engage has a return or prize, or is supposed to have. That is the incentive which makes men industrious and active. Whether that return or prize be determined by mere lot or chance makes it either a legitimate enterprise, or a lottery, and therefore an unlawful enterprise. We perhaps can illustrate that best by referring to some of the schemes of life in which men are engaged. Take, for instance, the life insurance companies, those that proceed either on the stock plan or on the assessment plan. They require of the member that he pay in a certain amount of money. That is the pecuniary consideration. That money is invested or supposed to be invested, in securities, and when the member dies, a certain amount stipulated in the policy, is paid to his heirs, or the beneficiary named in the policy. That is the return. The man may have been insured but a month, and have paid in but a few dollars, and have received back, \$5,000 or \$10,000. In such instances as that, a much larger sum has been returned than the consideration, but the fact that there was such a return does not make it an unlawful enterprise. Why? Because the prize is not determinable by, or dependent upon, chance or lot. It is dependent upon the life of a man, and the life of a man is determined by the laws of nature, and not by the chances of lot. A man who makes an investment in real estate may put in a few thousand dollars, and take out a million. What he puts in is the consideration; what he takes out is the prize. It may be a hundred-fold larger than what he puts in, but on what is it dependent? Upon the growth of the town in which he lives; upon the growth of public sentiment respecting the value of property in that particular locality; upon the law of growth, which is in itself a natural one, an industrial law. But suppose a man puts a ticket in a hat with a hundred other tickets, and then it is drawn by a blindfolded man, his chance of the prize offered is dependent upon that drawing. The ticket may cost but fifty cents. The prize may be worth \$10—much larger than the price of the ticket, though not larger in proportion than the life insurance policy or the real estate investment. But the getting of the prize is dependent upon the chance or lot of his ticket being drawn, not upon any natural law as a man's life, nor upon any industrial growth as the growth of the value of real estate.

“This illustrates to you the difference between legitimate investments, which may yield, according to the good fortune of the investor, a hundred-fold more than the amount invested, and a gambling investment according to a lottery, which can only yield in case the allotment or chance, which is purely artificial, turns in his favor.

“In the case at bar the return or prize is \$1,000. Now is that determined by lot or chance? Is it determined by one of the laws of nature, or of industrial growth, which determines the other returns of life? Let us look at the practical workings of the scheme. Let us look at it, first, independently of what is called the multiple system. Here is a company which in two years has taken in more than 50,000 applications. In order to make a return certain to each one of the applicants of the amount of money promised in the bond, it would be necessary that the company should have a fund of \$50,000,000. In two years they have only accumulated a fund of \$206,000. According to the constitution of the company, outside of lapses, there are 50,000 men who are entitled to these returns if they persist in paying. In two years 236 have been paid. If each

man were to get a return according to the promise of the company, outside of lapses, and every dollar which went into the fund of the company were to be used for that purpose, and no man to receive more than what he paid in, it would take 1,000 months or more than 83 years for each man to receive back his return. This money would be idle, not growing by interest or other investment. Is it not perfectly apparent that from the very necessity and constitution of the scheme, if the multiple system were not introduced, the company could not go on, and no man would receive back anything except those who had been the fortunate possessors of the first bonds?

"It is said—and is one of the boasts of the Company—that everybody who has been paid back has been paid \$1,000 on an investment not to exceed \$30. That again shows the entire impossibility, according to the constitution of the scheme, of but a limited few—one in a hundred—ever receiving any return, or prize, except for the lapses; because money lying idle in the treasury, shorn in the first place of 20 per cent. of the amount, will never grow to pay 1,000 to 1, or 1,000 to 30, so long as the present economic law of the universe prevails. These defendants have foreseen this, and foreseen that the Company must, therefore, come to an immediate end, and have instituted what is called the multiple system. Thereby a chance is held out to men, even after the Company has grown to be 50,000, to receive an early payment of their bonds. But upon what is that chance dependent? What determines that return or prize? Any law of nature or of industrial growth, such as applies to insurance companies or real estate investments, which I have used as illustrations? Not at all. It is solely dependent upon the order in which his bond may go through the registration process. If he draws a multiple, and the Company continues, he eventually will be paid. If he draws a numeral, it is as morally certain as any law of the universe that, unless the Company is almost entirely abandoned by its bondholders, he will never be paid. It is said here in argument that the lapses will secure certain payment in time; in other words, enough men will become discouraged at the outlook, and will drop out, so as to advance those whose bonds are deferred. What does that mean? It means that by the very constitution of this Company the success of its enterprise depends entirely upon its insolvency—its gross and well-known insolvency—so insolvent that in the very method of its organization no hope of its carrying out its promise can be entertained. Now the Court cannot say that that is a legitimate enterprise, promising a certain return of money, which by the very constitution of the Company, is dependent upon the insolvency of the Company and a wholesale repudiation of its promises. That is not the rule of any other legitimate enterprise. The determination, therefore, of the return or prize, is dependent upon a chance or allotment.

"The only substantial difference between the scheme disclosed to you by the proof and the well-recognized lotteries of the world, such as the Louisiana Lottery Company, is that the latter are, in comparison, honest and free from the opportunities of chicanery. The wheel of the lottery and the hat of the raffle are to the fortune hunter incomparably fairer contrivances for the determination of his chances. He is not dependent in them upon the honesty or accuracy of a secretary, with whom it is as easy to put one application through the register as another. The whole scheme disclosed by the proof is a cunning trick to attract the cupidity and ignorance of men.

"A great menace to the civilization not only of the United States, but of the world, is the growing tendency to gamble or engage in lottery. Two hundred years ago their promoters were characterized in the Statutes of England as rogues. No prospect is so attractive as that which is wrapped up in the mysteries of a chance. To the winner comes some money, many congratulations, wide advertisements through the newspapers, and the propensity to go in again. To the losers, one hundredfold in number, come stripped homes, impoverished wives, and children, lost opportunities of building up a competence legitimately, and in too many instances, the temptation to go in again upon means that are obtained from an employer or *cestui que trust*, first by a supposed borrowing, then by intentional theft, forgery and embezzlement. The rainbow of hope lures and lures until its chaser falls over the precipice into suicide or the penitentiary.

"The mails of the United States are intended for legitimate business or friendly communication, and are defiled by the dissemination and promotion of such a scheme as the evidence in this case admittedly discloses.

"If you believe, beyond a reasonable doubt, that these defendants deposited the printed matter submitted to you in the mails, as charged in the indictment, and that the scheme which it promoted was of the nature and character sworn to indisputably here by the witnesses, then it is your duty to return a verdict of guilty."

An appeal from the foregoing taken to the Circuit Court of Appeals, Seventh Circuit, was dismissed, March 22, 1894; and re-hearing refused October 27, 1894—12 Cir. Ct. App. 344.

McLaughlin v. National Mutual Bond and Investment Co. (Circuit Court, East District Pennsylvania, 13th December, 1894. 64 Federal Reporter, 908.

In this case also, which was a suit for an injunction and a receiver, the financial basis of the Bond-Investment contract was judicially examined.

DALLAS, Circuit Judge, said:—

"The defendant is a corporation created under the law of the State of West Virginia 'for the purpose—as stated in its certificate of incorporation,—of issuing and selling bonds upon monthly instalments, and payable from the redemption and reserve fund, made up of the appropriation of a certain part of the instalments paid in, according to tables which insure perfect equity to both large and small investors; the advantage of the association being to encourage and assist persons of moderate means to systematic saving and by advantageous co-operation to realize larger profits than they could by investing in savings banks or building associations.' In pursuance of this declared purpose of its creation, the defendant issues what are designated as 'Instalment Bonds', and which are in form certificates of its agreement to pay \$1,000 to the person named in each of such bonds respectively. No definite time is specified for making this payment, but it is therein provided that the 'bond shall become due and payable at the office of the said company on its surrender, when the monthly instalments thereon, together with its proportionate share of the reserve fund, shall equal its face value'. This undertaking to pay, at a time not fixed, but made contingent upon the operations of the company, is subject to 'the following express terms and conditions'. There shall be paid to the company 'monthly instalments' of four dollars each, and 'quarterly

dues' of one dollar each; and any default in either of these shall wholly release the company from obligation to pay at any time,—'shall work a forfeiture of the bond'. The instrument further provides that upon forfeiture of the bond 'all previous payments' made by its owner shall likewise be forfeited; that when forfeiture occurs 'a new bond in the regular order of issue at the date of surrender' of the forfeited bond can be obtained; and that if the bond shall have been 'kept in force by its terms and conditions for three years,' 'the monthly instalments made thereon, together with interest at the rate of two per centum per annum', will be refunded upon its surrender. To this point the meaning of the agreement plainly is that the company, in consideration of the payment to it of four dollars per month and one dollar quarterly, will (subject to the term and conditions which have been mentioned) pay \$1,000 to the owner of the bond when the monthly instalments paid by him, together with his 'proportionate share of the reserve fund', shall amount to \$1,000; or, in the alternative, will refund him the amount of his monthly instalments, with interest at the rate of two per cent. at or after the expiration of three years, if all the prescribed monthly and quarterly payments shall have been duly made. If it had been proposed merely to return to the holders of these bonds the sum of their monthly instalments when they should respectively amount to \$1,000, it is scarcely conceivable that any sane man could have been induced to part with his money. He would have no security for it; it would bear no interest; it would be withheld from him for 250 months or about 20 years; and to accomplish this, he would pay an additional sum of \$80. Of course, any misguided person who might be led into such a transaction would, on perceiving its character, hasten to withdraw from it, even at the sacrifice of payments already made, or would await only the expiration of the period of three years to claim the refund provided for. But nothing he could do would profit him. Even if the company should be able to, and should in fact, refund him his monthly instalments, with the interest stipulated, he would not be repaid in full. At the end of three years he would have paid as monthly instalments \$144, and this with two per cent. interest added, would make \$146.88, the amount to be refunded; but his quarterly dues for the same period would be \$12, which, being added to his monthly instalments, \$144, would make a total of \$156; and hence the so-called 'refunding' would consist in returning to him, after three years of waiting, \$10.88 less than he had actually paid in. Manifestly, there would be nothing in this 'to encourage and assist persons of moderate means to systematic saving, and by advantageous co-operation to realize larger profits than they could by investing in savings banks or building associations'. The enticing feature of the system—the real and only allurement that it presents to induce contribution to it—is to be found in that provision of the fourth clause of the bond which appropriates to its possessor 'its proportionate share of the reserve fund', and declares that 'it is subject, however, to redemption by the company at any time before its maturity, after all bonds of a lower number of this series have been redeemed, cancelled, or terminated.

'If so redeemed during the 1st year, the holder shall receive \$336.00.

If so redeemed during the 2nd year, the holder shall receive \$440.00.

If so redeemed during the 3rd year, the holder shall receive \$561.33.

If so redeemed during the 4th year, the holder shall receive \$702.88.

If so redeemed during the 5th year, the holder shall receive \$863.01.

If so redeemed any time after the 5th year, the holder shall receive \$1,000.00.'

"What the reserve fund is, or how to be derived, the bond does not explain, but in the company's certificate of incorporation it is referred to as 'the redemption and reserve fund made up of the appropriation of a certain part of the instalments paid in'. What part of the instalments is to be so appropriated is nowhere stated, but that it must be a very large part is made apparent by the following statement:—

To redeem a single bond during the first year there would be required	\$336 00
At the end of that year its owner would have paid in monthly instalments	\$48 00
Let interest be added on each instalment	1 32
	<hr/> 49 32
Excess	\$286 68

"According to the plan, this excess of \$286.68 must be provided for from the forfeited or non-forfeited instalments—either or both—paid in by others. If from forfeited instalments, the one man wins what the others have, by misadventure, already lost, and if from non-forfeited instalments, then the lucky individual gains extravagantly at the cost of later purchasers, for these must be additionally postponed in order that he may be immediately and excessively paid, and many of them must suffer a total loss through the ultimate exhaustion of the fund by the 'redemption' of 'bonds of a lower number' at an enormous and unconscionable premium. This might be deemed fair play by those who wittingly engage in games of chance, but as a method of systematic saving' provided for unwary 'persons of moderate means' it certainly does not 'insure perfect equity', as equity is understood by courts of justice. It appeals to cupidity, not to thrift; and lures to hazard, not to providence. It is a contrivance for handing over to some of those who embark in the venture the money of the others who join in it; and 'it is quite apparent that this can only continue so long as the treasury can be replenished by bringing in new members'. Its inherent vice is substantially the same as was pointed out with respect to a similar concern in the case of the National Endowment Co., 142 Pa. St., 450, 21 Atl., 879, and of which the Supreme Court of Pennsylvania said:—

"It manifestly belongs to that class of associations, by far too numerous, the practical effect of whose operations is to enrich a few at the expense of confiding and ignorant people. Such corporations are unlawful and injurious to the community."

"It is evident that the attractiveness of the present project is due to the opportunity which it affords for acquiring money by chance, and not as the reward of industry, frugality, or sagacity. The interesting question to those who participate in it is one of fate, and nothing else. It is this: Which of them shall be forced to forfeit, and so 'fall in fortune's strife'; and which of them, surviving that catastrophe, will have obtained redemption of their bonds before the final and inevitable collapse occurs? Upon these contingencies the monthly and quarterly payments are put in jeopardy, and according to the issue of the game, the company, the holder of these stakes, distributes them among the winners. All such schemes are inhibited. They are deceptive and fraudulent, and in their nature simply gambling. In re National Endowment Co., supra; Brua's Appeal, 55 Pa. St., 294; U. S. v. McDonald, 59 Fed., 563; Horner v. U. S., 147 U. S., 449, 13 Sup. Ct., 409.

"These plaintiffs are owners of 'bonds' of the defendant company, upon which they have paid the required instalments and dues. The money in the treasury of the company, therefore, constitutes a fund to which they are entitled to resort for recovery of their contributions to it. The possession of that fund was, as has been shown, obtained through fraud, and is in danger of misapplication in pursuance of an unlawful purpose. I am therefore of opinion that, irrespective of any considerations of a general or public nature, the case made out is one which demands the appointment of a receiver, for the prevention of fraud, and the preservation of the subject of litigation. Complainants' counsel has mentioned five cases in which, it is said, the Pennsylvania Courts of Common Pleas for the county of Philadelphia have, through receivers, taken possession of the funds of associations like the one now before this court; but those cases have not been reported, or in any manner presented for my examination, and consequently I have not had the advantage of consulting them. If they have been rightly understood by counsel, they support the conclusion which I have reached in the present one.

"It is objected that these complainants are not entitled to relief, because, under the terms of their bonds, they might surrender them, and receive a return of their monthly instalments with interest; but I cannot assent to this. The reimbursement suggested—not tendered—would not be satisfaction. It would be less than the aggregate amount of all the payments (instalments and dues) which the complainants have made; and the precise sum to which they may be actually entitled can be known only upon a full accounting, and an adjustment of the rights of all parties. There are other grounds upon which, perhaps, the objection should be overruled, but enough, I think, has been indicated to show that it is not well taken; and it would be unfortunate if this were otherwise, for the ends of justice would not be subserved by maintaining and technical subtlety which would render this suit abortive." (Decree granted for receiver and injunction.)

Discredited in the United States—where they originated—these Bond-Investment schemes are now endeavoring to obtain a foothold in various parts of the British Empire, and even in England itself. In the Manchester Guardian (England) of 22nd February, 1905, an Actuary examined a sample contract. He says:—

"The ignominious collapse of the pension tea business,* an event confidently predicted from the beginning by actuarial experts, should prove a danger signal against other hap-hazard financial projects, however alluringly they may be dressed up. But that this warning counts for less than might be expected is shown by the fact that a class of companies known as 'bond corporations,' recently introduced from the United States, where they have been generally condemned, continues to multiply in number and increase in activity. The general methods of these corporations are pretty uniform, comprising high-sounding titles, showy canvassing literature, full of statements exposing the ignorance of the authors, and promises of results which find no warrant either in experience or calculation. The *modus operandi* is as follows: Certificates of the face value of £50, redeemable ten years from the date of issue, unless redeemed at an earlier period, are offered to the public. In the language of the prospectuses of the

*See Appendix to Report of Inspector of Insurance for Ontario, 1905.

corporations, 'Each bond has attached to it a series of coupons of the value of £5 each, which are redeemed from time to time, as the resources of the corporations allow.' Each certificate is paid for by an entrance fee of 5s. and monthly instalments of 5s., each payable for ten years, making a total of £30, 5s. But the entrance fee of 5s. and the first three monthly instalments of 5s. each are set aside to cover the initial cost of securing the new members. Therefore 117 monthly payments of 5s. each go, apparently, to the credit of the funds, but as from each of these instalments the sum of 1s. is deducted for management expenses the total amount available for the redemption of the bond is reduced to £23. 8s. In other words the corporation receives 117 monthly instalments of 4s. each with which to redeem a certificate of £50, due in ten years from the date of issue or sooner.

HOW IT WORKS OUT.

"Now if, instead of being paid monthly, the instalments were paid at the beginning of the year in one sum of £2. 8s. and compounded at the rate of 4 per cent. interest for ten years the result in round figures would amount to only £29, and if compounded at 5 per cent. to £31. But as in practice the £5 coupons attached to each bond are being periodically redeemed in advance (this is, indeed, the grand attraction of the scheme), the total amount of interest earned during the ten years must be diminished in proportion to the extent that the funds are in the meantime reduced by the sums withdrawn for the redemption of the coupons. There is no adequate evidence of the rate at which the coupons are being redeemed, but the process of redemption must of necessity seriously reduce the total of £29 or £31 respectively which would result at the end of ten years if no redemptions were made. Assuming, however, that no part of the funds is withdrawn for the purpose of redemption (which is, of course, ignoring a most important factor and making the corporations a handsome gift in the calculation), and that all the money in hand can be improved at the handsome rate of 4½ per cent. compound interest, and crediting the account with £2. 8s. at the beginning of each year instead of scattering the instalments over the whole twelve months, it will still be necessary, despite all these favourable conditions, for these corporations to find, in round figures, an additional £20 in order to meet their liability of £50 on each certificate—a deficiency of 40 per cent. on each contract. For each batch of 100 members there would be a liability of £5,000 at the date of maturity of the certificates, but as the total contributions of the members plus 4½ per cent. compound interest (ignoring the loss of interest on the amount withdrawn from the funds for the redemption of the coupons) would amount to only £3,000, there would be a deficiency of £2,000 on the transaction. In other words, only 60 out of each batch of 100 members can ultimately receive payment in full, and the remaining 40 members must make a vicarious sacrifice of the whole of their contributions and interest.

"The promoters of these corporations, however, claim that there are other sources of income from which the deficiency of £2,000 on each batch of 100 certificates may be made up—namely, deaths, lapses, and fines. But the rules provide that if a member dies his instalments shall be repaid by the corporation, or the certificate may be continued by his legal repre-

sentative, so that the profit from this source may be regarded as a negligible quantity. We are told, however, in the prospectus of one of the most prominent of these corporations that: 'Adopting Carlisle's Tables (*sic*), which are a recognised authority, the actuarial soundness of the plan upon which this corporation has been established is the surest guarantee of its certain stability and unparalleled success.' There is, of course, no such thing as 'Carlisle's Tables.' The Carlisle Table of Mortality, a table of observations on the mortality of Carlisle, published in the year 1815, is no guarantee for the soundness of this scheme, and has no practical application to a scheme under which all members are admitted, without discrimination as to age or sex, on precisely the same conditions. As to surrenders and lapses, the rules of the corporations provide that a certificate may be redeemed at not less than 40 per cent. of the amount actually paid, which really means not less than 50 per cent. of the amount that has been put into the funds, as 20 per cent. of the instalments has been spent in the meantime on management expenses. But as the certificates may be transferred from one person to another, the number of those who will allow their certificates to lapse or accept as a surrender value 40 per cent. of the amount they have paid to the corporation will be reduced to the minimum. They will be able to make a better bargain by transferring the bond to some one else who will continue the certificate with a view to an early redemption of the £5 coupons, or the ultimate redemption of the certificate at its face value. There is, consequently, no reasonable hope that the deficiency of approximately £20 on each certificate can be made good out of surrenders, lapses, or fines. Indeed there is no known rule by which the number of deaths, surrenders and lapses can be ascertained, and the scheme is to that extent a hopeless jumble of unascertained factors—a sweepstake.

THE CONTRAST WITH INSURANCE.

"All this is supposed to be satisfactorily accounted for by the remark in the prospectus of one of the corporations, that 'The benefits of the system invented by Signor Tontine (*sic*) and the great advantages of the accumulation of compound interest go to swell the profits of each individual member.' Needless to say, there never was any such person as 'Signor Tontine.' Lorenzo Tonti, the Neapolitan, who flourished about the middle of the seventeenth century, did invent a system under which a lump sum was paid down by the member at the beginning of the transaction, but all interest in the combination was lost if the member died, no limit of time was made as to repayment, and the entire amount originally subscribed was received by the member who last survived. It will thus be seen that there is no parallel between the two schemes. Tonti's plan was, however, soon discredited, though it lingers on in the present day in the not too respectable form of lotteries. If all these facts were recognised by the promoters of these bond corporations people would at least join them with their eyes open. But a perusal of the literature issued by the corporations shows that they claim for the scheme the most rigorous scientific basis, whereas to the extent of about £20 in £50 it is a mere gamble. One of the canvassing methods of these undertakings is to draw a contrast between their scheme and that of life assurance—unfavourable, of course, to the latter. It is true that there is a complete contrast between the two schemes—the contrast between certainty and uncertainty. In life assurance, whatever rate of premium is charged, it is always sufficient

to meet the face value of the policy at the time it falls due either by death or, if an endowment, by maturity, quite irrespective of surrenders, lapses, or fines, and this despite the fact that life offices assume in their calculations that their funds earn about 1 per cent. less than the actual rate realised, so that they have 1 per cent. over their actual requirements to meet the face value of the policy. Life assurance premiums are adjusted to the age of each member, on data provided by mortality tables which have been patiently compiled and revised from time to time by the whole body of actuaries during several generations, and approved by the highest authority on the subject, the Institute of Actuaries of Great Britain. Furthermore, the full face value of a life policy is payable immediately on the death of the assured, even if that event takes place one hour after the issue of the policy, which is an all-important point of difference. Life offices, too, are obliged by law to make a return to the Board of Trade of their annual revenue account and balance sheet, and periodically to deposit a valuation of all assets and liabilities, giving the most complete and exhaustive information of all transactions, vouched for by the chief officers of the company, and invariably by a member of the Institute of Actuaries. But under the 'bond system' the circumstances are exactly the reverse of all this. In place of order there is chaos, and hazard takes the place of certainty. In none of the prospectuses that the writer has seen is the paid-up capital of these corporations stated, and he has never seen a revenue account nor a balance sheet. No statutory deposit of £20,000 is made with the Government, as in the case of life offices, nor do the corporations conform with any rules of the Board of Trade, and the whole system flies in the face of actuarial science and common sense. It is urged in the circulars of these concerns that 'The cost of conducting the business of the (bond) corporations is relatively much lighter than that which life assurance companies find it necessary to set apart for the purpose.' If this statement were true it would not establish the validity and security of the bond system. But it is not true. From the returns made annually by order of Parliament it will be seen that the expense of conducting the business of the ordinary life offices in this country, including the amount paid to the State by way of income tax and the management of over 300 millions sterling of funds, is about 14 per cent. of the premium income. But the admitted expense of the bond system is equal to about 23 per cent. of the premium income, or more than half as much again as the expense of life offices. What the ultimate expense will be under a system which publishes no details of its transactions who can say?

DISASTER INEVITABLE.

"Despite all these palpable and glaring defects, one of the largest of these corporations has the temerity to describe the system as 'the high-water mark of co-operative investment. The end of the nineteenth and the dawn of the twentieth centuries have witnessed many developments in many different directions, and in the financial world it may with every justification be said that the scheme of bond investment on the Tontine principle has taken rank as one of the greatest economic innovations of the time.' This sort of language may be used with impunity for some years to come. For although actuarially unsound from the beginning, the real strain will not be felt by these corporations until the bonds begin to mature after ten years. Even then the crisis may be deferred awhile, for matured certificates may be honoured at the expense of funds provided by

The Sterling Home Buyers' Union, a registered partnership firm composed of _____, all of _____, and having its chief place of business in _____, and hereinafter called the "Union," of the first part, _____ and _____

and _____ of the _____ in the County of _____ hereinafter called the "Contractor", of the second part.

And between said parties with all other persons who shall make like contracts with these parties.

WITNESSETH that in consideration of the benefits accruing mutually to the parties hereto and the payments of money to be made as hereinafter provided, it is agreed as follows:—

1. The Union shall number this contract in the order of its acceptance which shall be the next number higher than the contract of like kind last made by the Union. This and other like contracts shall mature in consecutive order, the benefits of this contract accruing after the fulfillment of all contracts of lower number according to the plan of co-operation herein described.

2. The Contractor shall pay to the Union on this contract the sum of two dollars and fifty cents at the Head Office of the Union on the first day of each and every month from the date hereof. Two dollars of such payments to be credited to the said Contractor, and placed in an account to be known as the "Home Fund Account", to be used for the purchase of real estate or the satisfaction of liens thereon according to the co-operative plan aforesaid; ten cents part thereof to be placed by the Union in an account known as the "Contingent Fund Account", to be used by the Union to meet interest, charges, contingencies and unforeseen expenses of the said Union; forty cents, the balance thereof, to be retained and used by the Union for and on account of management and other expenses.

3. Whenever there shall be accumulated a sum of fifty dollars by the Union from the payments placed in the "Home Fund Account" on this and like contracts entered into by the Union subsequent to this contract, and all obligations incurred under the contracts issued prior to the making of this contract, and all surrender obligations, if any, arising under like contracts issued subsequent hereto have been satisfied in full by the operation of the "Home Fund Account" under the provisions contained herein, this contract shall be deemed to have matured, that is to say, the owner of the contract having the lowest number then unmatured shall be entitled to have such amount invested by the Union in the purchase of land or home, or the satisfaction of a lien thereon for the holder of such contract as follows, and the Union shall only be required to expend, under this contract the sum of \$1,000.00 in monthly instalments of not more than \$50.00 each. After this contract matures as aforesaid, due notice thereof having been given to the Contractor and until the Contractor shall arrange to purchase real property or to satisfy a mortgage or other lien on real estate owned by him, the said sum of \$50.00 each month shall be kept and placed to the Contractor's credit in an account known as the "Maturity Fund Account".

4. Should the Contractor at any time before making twenty-four monthly payments in pursuance with this agreement become in arrears for more than one month, the Union may cancel this contract and all moneys paid thereon shall be forfeited.

5. Should the Contractor at any time before twenty-four monthly payments have been made hereunder become in arrears for fifteen days, said

Contractor may be reinstated by paying such arrears to the Union, but in that event this contract shall lose precedence to the next contract in the order of maturing.

6. Upon giving the Union sixty days' previous notice in writing after twenty-four monthly payments have been made hereunder the said contractor, if not in arrears, may on surrender of this contract receive the amount standing to the Contractor's credit in the "Home Fund Account".

7. All moneys retained by the Union from lapsed contracts shall be used to aid in surrendering and maturing its contracts.

8. Whenever this contract shall have matured and the said Contractor has arranged for the purchase of real estate or the satisfaction of a lien thereon, the Contractor shall furnish a complete abstract of the title and sheriff and tax certificates which shall be examined by the solicitors to the Union at the expense of the said Contractor. Upon the Union approving of the title, a deed shall be taken in their name, and they shall give the Contractor possession of the said property upon the Contractor giving to them concurrently therewith a land contract to purchase the same, said Contractor to be credited on the purchase price with the amount standing to the credit of the Contractor in the "Home Fund Account" hereunder. Such land contract shall supersede this contract and provide that the Contractor shall pay all taxes, local improvement rates, water rates, gas rates, insurance premiums and all other assessments chargeable against the property, and shall keep the property in good repair and also shall pay to the Union the balance of the purchase price in monthly instalments on or before the first day of each month at the rate of \$5.50 per month, which latter amount shall be applied by the Union in the manner following, that is to say: Five dollars part of said monthly instalment to be placed to the credit of said Contractor in the "Home Fund Account" as part payment on the purchase price of said property; ten cents part thereof to be retained by the Union and used in the "Contingent Fund Account", and forty cents, the balance thereof, to be retained by the Union to assist in defraying their expenses in conducting the business of the Union.

9. When the sum to the Contractor's credit in the "Home Fund Account" shall aggregate the amount of the purchase price, less the amount the Contractor has to his credit before maturity, and said Contractor has satisfied all obligations in full to the Union, the lien of the Union shall be discharged and the Contractor shall be entitled to a deed of the said property. The said land contract shall also provide that if the Contractor shall fail or refuse to pay the sum due monthly at the office of the Union or the taxes or other payments within thirty days after the same becomes due, then all future payments forthwith become due and payable at the office of the Union and the Union may treat the Contractor as a tenant holding over, after the expiration of his lease. Provided nevertheless that in the case of such default in payment occurring before two years from the date of the purchase of the said property, the Contractor shall be allowed one month, and after two years from such purchase three months in which to pay up the arrears before any action shall be taken by the Union.

10. At any time after the property has been purchased or the lien thereon taken by the Union for the Contractor, said Contractor may have the option of paying the total balance of the indebtedness thereon at any time or times and shall be entitled to a deed thereof provided also that said Contractor shall have the privilege of paying at any time, any sum in excess of the monthly instalments, and upon paying a sum in excess of

the said monthly instalments then due, said Contractor shall be entitled to a credit of an amount equal to six per cent. on such excess of the said monthly instalment then due, provided said Contractor is not otherwise in default.

11. Whenever the Contractor shall have paid off twenty-five per cent. of the purchase price, the Contractor shall upon giving the Union a first mortgage on said lands on a form prescribed by the Union be entitled to a deed of the said property.

12. This contract may at any time before cancellation (provided the Contractor is not in arrears), be assigned by the Contractor on a form authorized by the Union to any person qualified to satisfy the obligations devolving upon said Contractor to perform, by giving notice to said Union, and by paying a transfer fee of fifty cents when all the benefits accorded the Contractor shall enure to said Contractor's assignee.

13. The Union reserves the right to appraise the property at the expense of the said Contractor, which expense shall be debited to the Contractor's account before paying out any money and will pay no more than it is reasonably worth.

14. If when this contract matures the money to the credit of the Contractor in the "Home Fund Account" is used to discharged liens of any kind against real estate owned by the Contractor, said Contractor shall give to the Union a deed of such property and shall be entitled to a land contract as hereinbefore provided or shall give the Union a first mortgage on a form authorized by the Union thereon.

15. In case of the death of the Contractor at any time during the currency of this agreement, all benefits hereunder shall accrue to the Contractor's personal representative, upon said personal representative assuming this contract on a form prescribed by the Union.

16. When the amount to the credit of the Contractor in the "Home Fund Account" paid by the Contractor both before and after maturity, shall aggregate without interest, an amount equal to the sum paid by the Union in the purchase of property or in the paying of liens on the property together with all costs and other fees chargeable hereunder against the Contractor, said Contractor shall be deemed to have fulfilled the said contract and all payments hereunder shall forever cease.

17. The Union shall have the privilege upon such terms as said Union may deem reasonable at any time after maturity, of assisting any Contractor, in case of sickness, accident or distress, by paying for said Contractor out of the "Contingent Fund" or out of lapses, three monthly instalments during which time the Contractor shall not be considered as having waived or forfeited any right or rights hereunder.

18. All titles to real estate shall be investigated and all contracts, agreements, conveyances, mortgages or other documents required for the purpose of giving effect to this agreement shall be prepared, settled and approved by the solicitors to the Union and the Contractor shall bear and pay said solicitors' reasonable and proper charges for the same, together with registration fees and other necessary disbursements, and until paid the Union shall have a lien in respect thereof on all money to the credit of the Contractor in the "Home Fund Account" and the "Maturity Fund Account" and on any property held by the Union by deed, mortgage or otherwise by the Contractor.

19. Any notice required to be served by either party hereto on the other shall be served personally or by a registered letter, postage prepaid, if on the Union addressed to the Union at its Head Office and if on the Contractor addressed to said Contractor at last known place of address of said Contractor.

20. All covenants, provisoes and conditions herein contained where the context permits, shall be binding on the said Contractor and said Contractor's heirs, executors and administrators, and on the said Union, its successors and assigns.

In witness whereof the said parties hereto have hereunto set their hands and seals.

Signed, sealed and delivered

in the presence of

(Seal.)

Time.....

When Feargus O'Connor's scheme was before the Court in *O'Connor v. Bradshaw*, Chief Baron Pollock held that the scheme, in addition to being otherwise illegal, was a lottery. This lottery element has been a good deal considered by the Courts in the United States in connection with the contracts of Investment Bond Companies and Home-Building Associations, where the contracts mature on certain contingencies, or according to some rotation or cycle of contract numbers. On the question, *What is a lottery?*, the United States cases up to the year 1894 are collected and reviewed in an editorial note to *McDonald v. United States* (a bond-investment case), in 12 Circuit Court Appeals at pages 346 to 350.

In the following recent case, the Court gave an instructive analysis of a common type of Home-Building Contract.

STATE EX REL. PROUT, ATTY.-GEN. v. NEBRASKA HOME CO'Y.

Supreme Court of Nebraska.—Nov. 19th, 1902.*

*Rehearing denied Jan'y 21, 1903.

92 N. W. Reporter, 763.

1. To constitute a lottery, it is necessary that a prize be offered and the payment of something of value for a chance to obtain the prize.

2. The prize may be anything of value. A preference or privilege in the distribution of a common fund among those entitled thereto may constitute a prize.

3. A scheme whereby a common fund is to be produced by the contributions of various parties, and afterwards distributed among the parties contributing thereto, and a valuable preference or privilege in the distribution thereof is made to depend up on chance is a lottery, within the meaning of our statute prohibiting lotteries.

4. Contracts in which a corporation in consideration of stated payments made to it, makes promises, which are the main inducement to such contract, and are impossible to perform are unlawful being against public policy.

5. A corporation organized under the laws of this state, which is engaged in a business forbidden by statute, or unlawful as against public policy, may be deprived of its charter and dissolved by proceedings in quo warranto.

(Syllabus by the Court.)

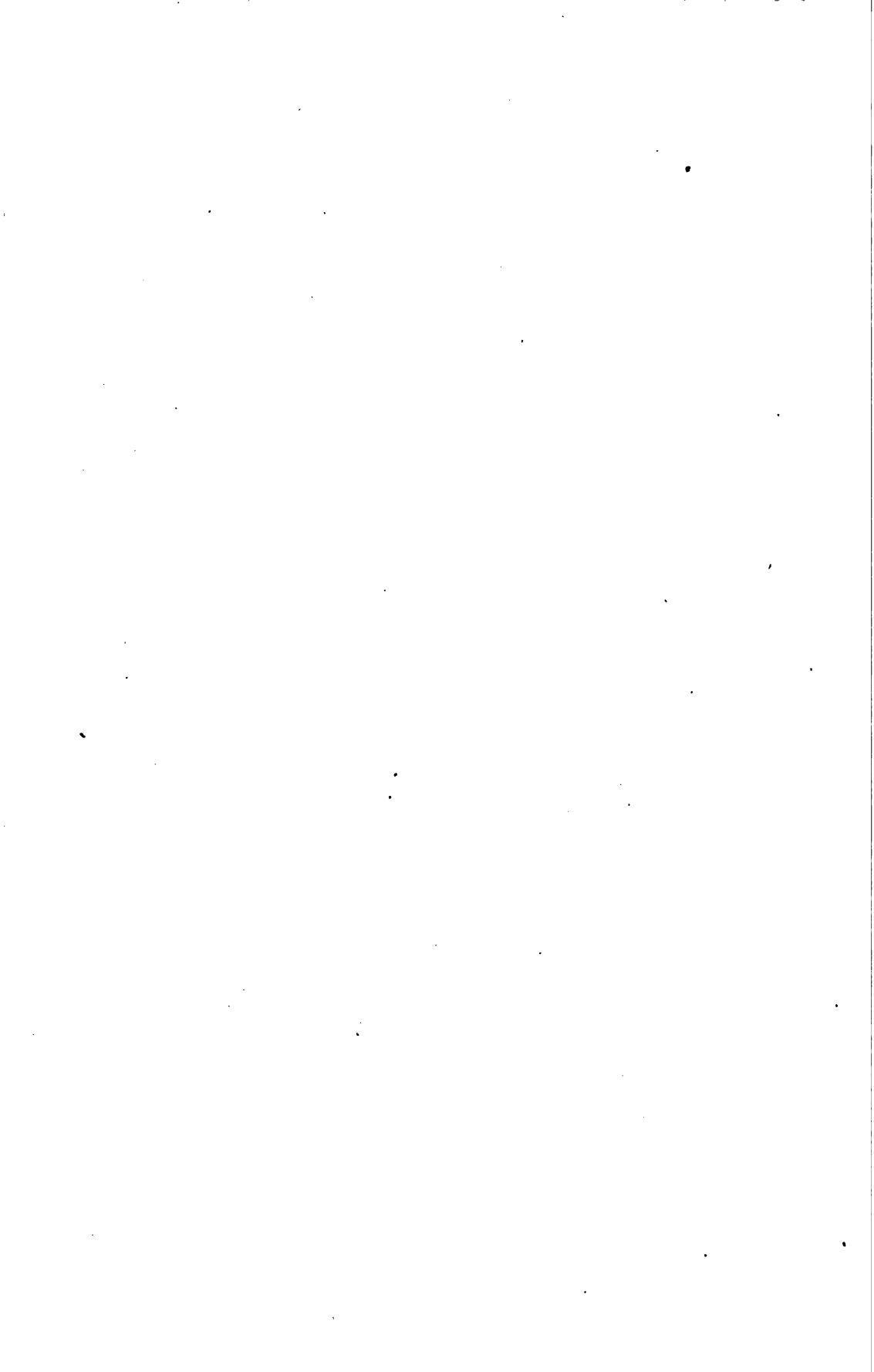
1. Does this scheme involve the elements of a lottery? To constitute a lottery, there must be a prize offered, and the payment of something for a chance to obtain it. The Attorney General has furnished the Court with an "expert's table", which is derived from a computation based upon the issuing of contracts upon 1,000 applications received at the same time, and each holder paying his instalments according to his agreement.

We do not understand that the defendant's attorneys deny the accuracy of the result obtained upon the basis assumed, and it appears that the twenty-two holders of the lowest numbered contracts would get their first instalments respectively within the first twenty-month period after the contracts were made, and would receive the full sum of one thousand dollars (\$1,000) within the next twenty-month period thereafter; whereas the holder of contract numbered 1,000, although making his payments monthly, would not have any returns from his investment until more than seventy years from the time he took the contract and began payment. The advantage of the fortunate holder of the early number is manifest. To obtain such an preference is to obtain something of value. "It is idle to say that a sum or an obligation for a sum due and payable to-day, or at an early day, is of no more value than an obligation for an equal amount, without interest, payable at a remote and indefinite time"; *MacDonald v. U. S.*, 12 C. C. A., 339, 63 Fed. 426. The question, then, is whether the element of chance enters into the scheme by which one contract holder obtains this advantage over another. The contracts are to be "numbered" and dated in regular numerical order as applications are received at the home office". The applicant must take his chances as to how many applications may be received at the same time that his is received, and, if there are several at the same time, he must take his chance of preference over other applications received with his. In *MacDonald v. U. S.*, supra, Judge Wood said: "Whether or not a purchaser will obtain a bond of one number or another depends upon the order in which his application shall reach the hand of the secretary, and that is largely a matter of chance. The secretary receives applications by mail and otherwise, sometimes singly and sometimes a number together; and in the order of receipt, and as he chances to take up one or another first, passes them through a registering device, and, in accordance with the notations so made upon the applications, the bonds are numbered and issued. But for the purchaser's hope, or, as it may well be said, for his chance, of getting a multiple number, the business would soon cease." He held that "the element of chance incident to the numbering of the bonds before they were issued" made the scheme a lottery. The reasoning of the Court in the *MacDonald Case* was adopted by Judge McComas in a similar case recently decided in the Supreme Court of the District of Columbia, *U. S. v. Sherwood* (unreported). Judge McComas fortifies his conclusions by quotations from other authorities, and holds that under such a plan "the number of the certificate and their consequent value depends upon chance". A certified copy of his very clear and satisfactory opinion is on file in this case. He says, "In different States applicants on the same day may mail subscriptions for certificates in this company. Whether or not an applicant will receive a certificate of one number or another depends upon the order in which the application may reach the officer of this company who issues the certificates, and that is a matter of chance. This officer receives these applications by mail and otherwise, it may be one at a time, it may be many at the same time, and according to the order he chances to receive them, or as he chances to take up one or another, and determines the number of each applicant's certifi-

cate, the certificates are numbered and issued. He who, by these chances, luckily receives an earlier number, will be paid sooner, and will pay in less money, than another who subscribing on the same day, receives a later number, and will, by these chances, be required to pay longer, and pay more money, and wait longer for payment of his shares. It is this element of chance in the numbering of the certificates which I believe to be in violation of this anti-lottery law. It is evident that the inducement to subscribe consists mainly in the chance of securing an early or lucky number." This reasoning is satisfactory to our minds, and we have been referred to no authority conflicting with the views so announced. The suggestion that the applicant will know the number of his contract before he accepts it, and, if not satisfied, may reject the contract, is without merit. By his application he agrees to accept the contract, and he is presumed to know the terms of the contract before he makes the application. The suggestion is predicated upon the idea that he will not perform the agreement that he has made in his application, but will forfeit the fee "for registering and issuing each application and contract", and so risk only the \$3. If that is the proper construction of the contract, the result is the same. It involves the payment of \$3 for the chance of obtaining an early number.

This defendant cannot be allowed the protection of its charter to do business in this State for another reason. Its plan involves taking money from its patrons upon contracts which, on its part, it is impossible to perform. It professes to be a "home company", and it agrees and undertakes to assist the holders of its contracts in purchasing and paying for a home. It issues contracts which, through the misfortune of the holders and the numbering of the applications, will bring no assistance before the expiration of the ordinary allotment of three-score years and ten. It cannot result in assistance to such holders in procuring a home in this world, and it does not profess to render assistance in any other. If it is intended that there will be new patrons whose monthly payments shall be used to make good the company's promise to holders of earlier contracts not otherwise provided for the situation is still worse. The company cannot furnish the funds to assist these new patrons to obtain homes before the time will come when in the ordinary course of nature they cannot avail themselves of such assistance. Their own payments cannot do so or help to do so. They are pledged to make up the deficiency existing before they obtained their contracts. They can hope to obtain the fruits of their contracts during their natural lives only from the payments to be made by others who obtain contracts after them, and there must be a sufficient number of these others in order to bring about the hoped-for result. It appears from the table referred to that about one-third of the holders of the first 1,000 contracts, supposed to be issued at one time, would be able to procure homes within twenty-five years. To enable 1,000 to do so, there must be 3,000 contracts taken, or 2,000 new patrons must take their contracts soon after the first 1,000 were taken. To enable these additional 2,000 to obtain the promised assistance there must be a still larger number of other contracts taken within a short time after the 2,000 take theirs, and so on in progressional numbers, which must within a few years run into infinity. The contracts so contemplated cannot, of course, all be fulfilled, and public policy will not permit the State to become a party to such a scheme. The defendant's business is for these reasons unlawful.

The demurrer is sustained and judgment of ouster will be entered as prayed.



REPORT
OF THE
Minister of Education
Province of Ontario
FOR THE YEAR
1904

PART I.
(WITH THE STATISTICS OF 1903.)

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO.



TORONTO:
Printed and Published by L. K. CAMERON, Printer to the King's Most Excellent Majesty.
1905

TABLE OF CONTENTS

PART I.

	PAGE.
STAFF OF DEPARTMENT.....	iii.
<i>SUMMARY OF STATISTICS:</i>	
I.—Elementary Schools	v.
II.—Secondary Schools	vii.
III.—General, Elementary and Secondary Schools.....	vii.
I.—PUBLIC SCHOOLS, (including Separate Schools.)	
1. School Population, Attendance.....	viii.
2. Classification of Pupils.....	ix.
3. Teachers' Certificates.....	ix.
and Salaries	x.
4. Receipts and Expenditure	xi.
II.—ROMAN CATHOLIC SEPARATE SCHOOLS.....	xii.
III.—PROTESTANT SEPARATE SCHOOLS.....	xii.
IV.—COLLEGIATE INSTITUTES AND HIGH SCHOOLS.	
1. Receipts, Expenditure, Attendance.....	xii.
Cost per pupil	xiii.
2. Classification of Pupils, Matriculation, etc.....	xiii.
Occupation of parents	xiv.
V.—DEPARTMENTAL EXAMINATIONS, ETC	xiv.
VI.—TEACHERS' INSTITUTES	xv.
VII.—PUBLIC LIBRARIES.....	xv.
ART SCHOOLS.....	xvii.
LITERARY AND SCIENTIFIC INSTITUTIONS.....	xvii.
<i>GENERAL REMARKS:</i>	
I.—THE REVISED REGULATIONS.....	xvii.
II.—CONTINUATION CLASSES.....	xx.
III.—SCHOOL LIBRARIES.....	xx.
IV.—TRAVELLING LIBRARIES	xxi.
V.—PUBLIC LIBRARIES	xxii.
VI.—FREE TEXT BOOKS.....	xxii.
VII.—HOME WORK.....	xxiv.
VIII.—CONSOLIDATED SCHOOLS	xxvi.
IX.—SUMMER SCHOOLS	xxvi.
X.—TEMPERANCE AND HYGIENE.....	xxvii.
XI.—NATURE STUDY	xxviii.
XII.—SCHOOL GARDENS.....	xxix.
XIII.—AGRICULTURE	xxxii.
XIV.—INSPECTION	xxxiii.
XV.—WOMEN TEACHERS.....	xxxvii.
XVI.—FUNCTIONS OF THE SCHOOL.....	xxxix.
XVII.—EXPERT KNOWLEDGE IN SCHOOL ADMINISTRATION.....	xli.
XVIII.—TEACHERS' CERTIFICATES.....	xliii.
XIX.—UNIVERSITY DEVELOPMENT	xliv.
XX.—CONCLUSION.....	xl.

APPENDICES.

APPENDIX A.—STATISTICAL TABLES, 1903.

	PAGE.
1. <i>Public Schools.</i>	
I.—TABLE A.—School Population, Total and Average Attendance, etc.	3
II.—TABLE B.—Reading Classes—Pupils in the various branches of instruction	6
III.—TABLE C.—Teachers, Salaries, Certificates, etc.	12
IV.—TABLE D.—School Houses, Prayers, Maps, etc.	14
V.—TABLE E.—Financial Statement.	16
2. <i>Roman Catholic Separate Schools.</i>	
I.—TABLE F.—Financial Statement, Teachers, etc.	22
II.—TABLE G.—Attendance, Pupils in the various branches of instruction, Maps, etc. ...	26
3 <i>Collegiate Institutes and High Schools.</i>	
I.—TABLE H.—Financial Statement, Charges per year.	30
II.—TABLE I.—Attendance, Pupils in the various branches of instruction, and examina- tion results	36
III.—TABLE K.—Miscellaneous, School Houses, Pupils in the different Forms, etc.	48
4. <i>Protestant Separate Schools.</i>	
TABLE L.—Protestant Separate Schools.	54
5. <i>Miscellaneous.</i>	
TABLE M.—Report on Truancy.	55
TABLE N.—Report on Kindergartens.	56
TABLE O.—Report on Night Schools.	56
6. <i>General Statistical Abstract.</i>	
TABLE P.—General Statistical Abstract	57
APPENDIX B.—TEACHERS' INSTITUTES, FINANCIAL STATEMENT, 1903.	58
APPENDIX C.—RURAL PUBLIC SCHOOL LIBRARIES, 1903-4.	60
APPENDIX D.—INSPECTION OF SCHOOLS, 1904.	
I. List of Inspectors	65
II. Diplomas for School Premises.	68
APPENDIX E.—CONTINUATION CLASSES, 1903-4.	69
APPENDIX F.—ADMISSION OF CANDIDATES TO COLLEGIATE INSTITUTES AND HIGH SCHOOLS, 1904	77
APPENDIX G.—FREE TEXT BOOKS IN RURAL SCHOOLS, 1904.	81
APPENDIX H.—PROCEEDINGS FOR THE YEAR 1904.	
I.—REGULATIONS AND CIRCULARS.	82
Apportionment of Public School Grant.	163
II.—ORDERS IN COUNCIL.	195

APPENDIX I.—PUBLIC AND FREE LIBRARIES, ART SCHOOLS, LITERARY AND SCIENTIFIC INSTITUTIONS, 1903.

	PAGE
Report of the Superintendent.....	196
Libraries in the Province.....	199
I.— <i>Public Libraries (not free)</i>	203
II.— <i>Public Libraries (free)</i>	210
III.— <i>Art Schools and Departmental Drawing Examinations</i>	217
<i>Art Schools.</i>	
1. Extract from Report of Hamilton Art School.....	225
2. do St. Thomas Art School.....	226
3. do Toronto Art School.....	226
4. do Ontario Society of Artists.....	226
<i>Literary and Scientific Institutions.</i>	
1. Report of the Hamilton Scientific Association.....	227
2. do Ottawa Literary and Scientific Society.....	228
3. do L'Institut Canadien Francais, Ottawa	229
4. do St. Patrick's Literary and Scientific Association, Ottawa	229
5. do Ottawa Field Naturalists' Club.....	230
6. do Ottawa University Society.....	231
7. do Royal Astronomical Society of Canada, Toronto	232
8. do Toronto Canadian Institute.....	233
9. do Wellington Field Naturalists' Club, Guelph.....	234
10. Historical Societies.....	234
APPENDIX J.—REPORT OF THE LIBRARIAN OF THE EDUCATION DEPARTMENT.....	234



Education Department, Toronto



Rural School Gardens, North Gower.



Rural School Gardens, Bowesville.

(In the Middle of the Lesson)



Rural School Gardens, Richmond.

(A Hundred Gardeners.)



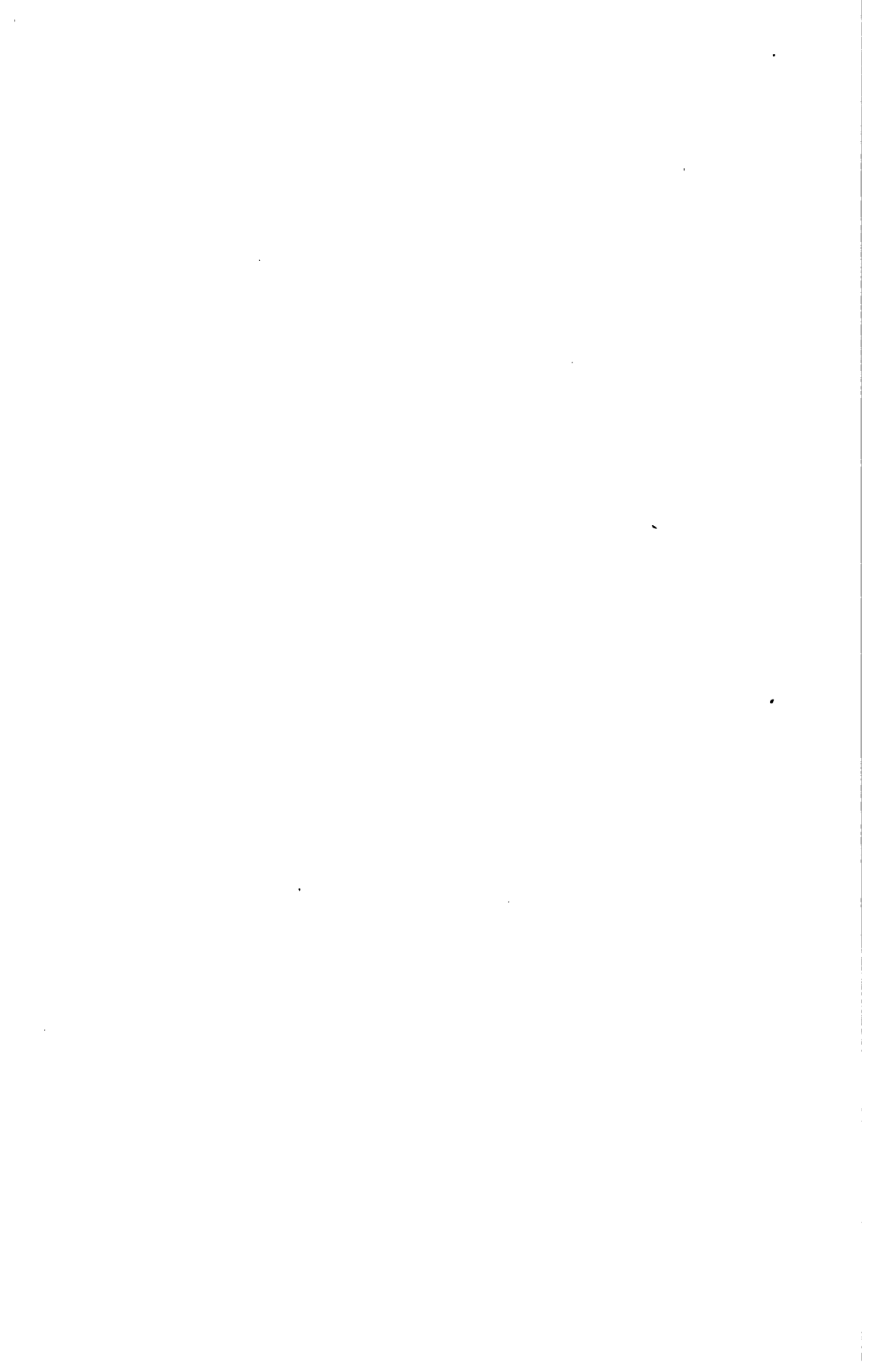
Rural School Gardens, Richmond.

(A Hundred Plots.)



Rural School Gardena, Carp.

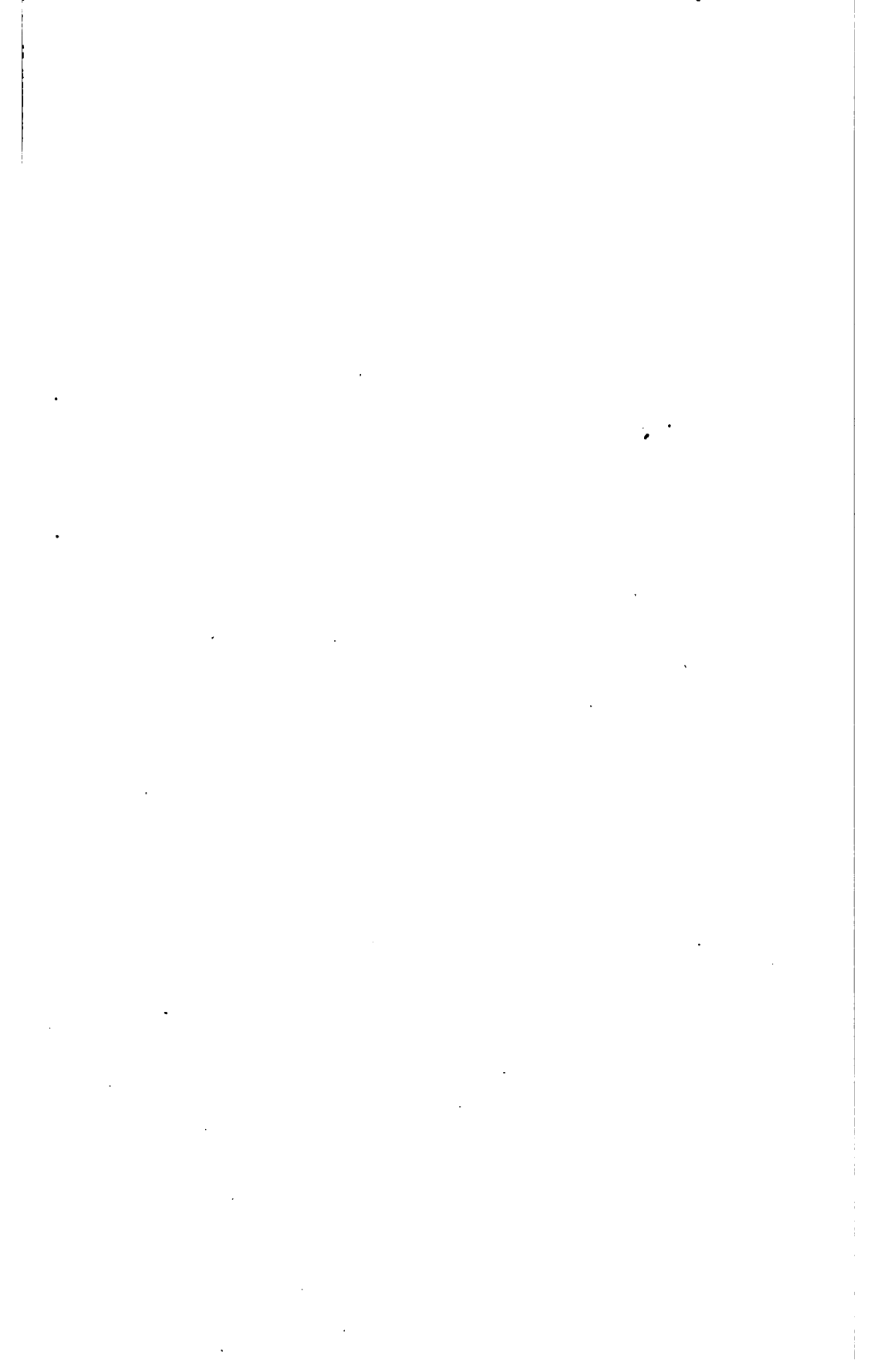
(Gathering Flowers.)





Rural School Gardens, Mohr's Corners

(A Group of Harvesters.)





Rural School Gardens, Carp.

(Harvesting and Ploughing.)

GENERAL REPORT, 1904.



WARWICK BRO'S & RUTTER, LIMITED, PRINTERS,
TORONTO.

EDUCATION DEPARTMENT.

MINISTER OF EDUCATION :

HON. R. A. PYNE, M.D., M.P.P.

DEPUTY MINISTER OF EDUCATION :

JOHN MILLAR, B.A.

H. M. Wilkinson,	-	-	-	-	-	-	-	-	Senior Clerk and Accountant.
A. C. Paull,	-	-	-	-	-	-	-	-	Clerk of Records.
T. J. Greene,	-	-	-	-	-	-	-	-	Assistant Clerk of Records.
E. A. Faulds,	-	-	-	-	-	-	-	-	Clerk of Statistics.
T. F. Callaghan,	-	-	-	-	-	-	-	-	Clerk of Correspondence.
S. A. May,	-	-	-	-	-	-	-	-	Assistant Clerk of Correspondence.
F. Woodley,	-	-	-	-	-	-	-	-	Assistant Accountant.
Allen Ker,	-	-	-	-	-	-	-	-	Clerk and Stenographer.
Miss S. B. Shields,	-	-	-	-	-	-	-	-	Stenographer.
L. McCorkindale,	-	-	-	-	-	-	-	-	Caretaker.

Departmental Examinations.

W. H. Jenkins, B.A.,	-	-	-	-	-	-	-	-	Registrar.
F. N. Nudel,	-	-	-	-	-	-	-	-	Clerk and Sec. to Bd. of Examiners.
W. W. Jeffers,	-	-	-	-	-	-	-	-	Clerk of Examinations.
R. J. Bryce,	-	-	-	-	-	-	-	-	Assistant Clerk of Examinations.

Public Libraries, Art Schools, Etc.

S. P. May, M.D., C.L.H.,	-	-	-	-	-	-	-	-	Superintendent.
Wm. Lemon,	-	-	-	-	-	-	-	-	Clerk.

Library, Museum, Etc.

J. George Hodgins, M.A., LL.D.,	-	-	-	-	-	-	-	-	Historiographer.
H. R. Alley,	-	-	-	-	-	-	-	-	Librarian.
Miss J. Stocks,	-	-	-	-	-	-	-	-	Assistant Librarian.
F. F. Evans,	-	-	-	-	-	-	-	-	Clerk.
David Boyle, Ph. B.,	-	-	-	-	-	-	-	-	Superintendent of Museum.
Miss E. Dennis,	-	-	-	-	-	-	-	-	Stenographer.

REPORT

OF THE

MINISTER OF EDUCATION

FOR THE YEAR 1904

PART I

WITH THE STATISTICS OF 1903.

To the Honorable Wm. Mortimer Clark, K. C.,
Lieutenant-Governor of the Province of Ontario.

May it Please Your Honor :

I herewith present Part I. of the Report of the Education Department for the year 1904 with the statistics for the year 1903.

SUMMARY OF STATISTICS.

1. ELEMENTARY SCHOOLS.

a. Public Schools.

Number of Public Schools in 1903.....	5,734
Increase for the year.....	63
Number of enrolled pupils of all ages in the Public Schools during the year....	403,161
Decrease for the year.....	4,963
Average daily attendance of pupils.....	230,730
Decrease for the year.....	1,933
Percentage of average attendance to total attendance.....	57.2
Number of persons employed as teachers (exclusive of Kindergarten and Night School teachers) in the Public Schools : men, 2,062 ; women, 6,498	
total.....	8,560
Decrease : men 138 ; increase, women 201 ; total increase....	63
Number of teachers who attended Normal School.....	4,795
Increase for the year.....	194
Number of teachers with a University degree.....	85
Increase for the year.....	4
Average annual salary for male teachers.....	\$465
Increase for the year.....	\$29
Average annual salary of female teachers.....	\$324
Increase for the year.....	\$11

Amount expended for Public School houses (sites and buildings).....	\$347,865
“ “ for teachers' salaries.....	\$3,096,132
“ “ “ all other purposes.....	\$1,209,463
Total amount expended on Public Schools.....	\$4,653,550
Increase for the year.....	\$263,831
Cost per pupil, (enrolled attendance).....	\$11.54
Increase for the year.....	\$.79

b. Roman Catholic Separate Schools.

Number of Roman Catholic Separate Schools in 1903.....	412
Increase for the year.....	21
Number of enrolled pupils of all ages.....	47,117
Increase for the year.....	1,153
Average daily attendance of pupils.....	29,538
Increase for the year.....	721
Percentage of average attendance to total attendance.....	62.69
Number of teachers.....	896
Increase for the year.....	26
Amount expended for School Houses (sites and buildings).....	\$90,862
Amount expended for teachers' salaries.....	\$213,861
“ “ for all other purposes.....	\$129,506
Total amount expended on R. C. Separate Schools.....	\$424,319
Decrease for the year.....	\$11,122
Cost per pupil (enrolled attendance).....	\$9.01
Decrease for the year.....	\$.46

c. Protestant Separate Schools.

Number of Protestant Separate Schools (included with Public Schools, a) in 1903.....	5
Decrease for the year.....	1
Number of enrolled pupils.....	314
Decrease for the year.....	152
Average daily attendance of pupils.....	191
Decrease for the year.....	56

d. Kindergartens.

Number of Kindergartens in 1903.....	123
Increase for the year.....	3
Number of pupils enrolled.....	11,880
Increase for the year.....	580
Average daily attendance of pupils.....	4,706
Increase for the year.....	110
Number of teachers engaged.....	250
Increase for the year.....	3

e. Night Schools.

Number of Night Schools in 1903-4.....	10
Decrease for the year.....	1
Number of pupils enrolled.....	701
Increase for the year.....	31

Average daily attendance of pupils.....	162
Decrease for the year.....	8
Number of teachers engaged.....	17

II. *SECONDARY SCHOOLS.

a. High Schools.

Number of High Schools (including 41 Collegiate Institutes) in 1903.....	135
Increase for the year.....	1
Number of Teachers in High Schools.....	619
Increase for the year.....	26
Number of Pupils in High Schools.....	25,722
Increase for the year.....	1,250
†Average Annual Salary, Principals.....	\$1,220
Increase for the year.....	\$22
†Average Annual Salary, Assistants.....	\$875
Increase for the year.....	\$18
†Average Annual Salary.....	\$950
Increase for the year.....	\$16
†Highest Salary Paid.....	\$2,900
Amount expended for High School teachers' salaries.....	\$571,559
“ “ “ “ houses (sites and buildings).....	\$48,723
Amount expended for all other High School purposes.....	\$195,800
Total amount expended on High Schools.....	\$816,082
Increase for the year.....	\$46,402
Cost per Pupil (enrolled attendance).....	\$31.72
Increase for the year.....	\$.27

b. Continuation Classes.

Number of Continuation Classes, 1903-4 (included in Public and Separate Schools, I, a and b), practically doing High School work : Grade A, 68 ; Grade B, 45 ; Grade C, 118 ; Grade D, 188 ; total.....	419
Increase for the year, Grade A, 3.....	
Decrease, Grade B, 3, Grade C, 16 : Grade D, 45.....	
Number of pupils in attendance.....	4,598
Decrease for the year.....	266

III. GENERAL.

ELEMENTARY AND SECONDARY SCHOOLS.

Total population of the Province, 1903.....	‡2,204,830
Pupils enrolled in Elementary and Secondary Schools.....	488,581
Decrease for the year.....	1,949
Average daily attendance.....	280,453
Decrease for the year.....	223
Percentage of total population enrolled.....	22.16
Average length of school term in days.....	199.06
Average number of days attended by each pupil enrolled.....	114.18

*The Curriculum of Secondary Schools includes all the subjects required for matriculation into the University.

†These salaries are based on Returns to the Department, dated January, 1901.

‡Estimated.

Average cost per pupil (enrolled attendance) in all schools :

	1902	1903
Sites and buildings.....	\$ 97	\$ 98
Teachers' salaries.....	7 63	7 94
All other expenses.....	2 80	3 14

For all purposes.....\$11 40 \$12 06

Average cost per pupil (average attendance) in all schools :

	1902	1903
Sites and buildings.....	\$ 1 70	\$ 1 70
Teachers' salaries.....	13 34	13 84
All other expenses.....	4 89	5 47

For all purposes.....\$19 93 \$21 01

Expenditure per capita of population, 1903.....\$2 67

I. PUBLIC SCHOOLS (INCLUDING SEPARATE SCHOOLS).

These tables, 1, 2, 3 and 4, for the purpose of comparison with previous years in which the R. C. Separate Schools were included with Public Schools, include R. C. Separate Schools. In the Statistical Tables, A, B, C, D, E, (Appendix A), the Separate Schools are excluded.

1.—School Population—Attendance.

The School population of the Province, as ascertained by the assessors, is as follows:

Year.	School age.	School population.	Pupils enrolled under 5.	Pupils enrolled 5 to 21.	Pupils enrolled over 21.	Total number of enrolled pupils.	Average daily attendance.	Percentage of average attendance to total number attending school.
1867.....	5—16	447,726	.....	2380,511	521,132	401,643	163,974	40.82
1872.....	5—16	495,756	.....	2438,664	520,998	454,662	188,701	41.50
1877.....	5—16	494,804	1,480	488,553	877	490,860	217,184	44.25
1882.....	5—16	483,817	1,352	469,751	409	471,512	214,176	45.42
1887.....	5—21	611,212	1,569	491,242	401	493,212	245,152	49.71
1892.....	5—21	595,238	1,686	483,648	391	485,670	258,880	52.26
1897.....	5—21	590,056	1,885	481,120	272	482,777	273,544	56.66
1902.....	5—21	584,512	1,001	452,977	110	454,088	261,480	57.58
1903.....	5—21	577,883	917	449,255	106	450,278	260,268	57.80

a 5—16. b Other ages than 5 to 16. Note.—Kindergarten and Night School pupils are not included in above table.

The decrease in the enrolled attendance in 1903 is very largely offset by the increased attendance noticed in the R. C. Separate Schools, and the High Schools and Collegiate Institutes. See tables II. and IV. of this portion of the Report.

Of the 450,278 pupils in 1903, 260,617 or 57.88 per cent. were enrolled in rural schools, and 189,661 or 42.12 per cent. in the cities, towns, and incorporated villages of the Province.

2.—Classification of Pupils.

Year.	1st Reader—Parts I and II.	2nd Reader.	3rd Reader.	4th Reader.	5th or High School Reader.	Writing.	Arithmetic.	Drawing.	Geography.	History.	Music.	Grammar and Composition.	Temperance and Hygiene.
1867	79,365	96,184	83,211	68,896	71,967	231,734	241,501	5,450	272,173	61,787	47,618	147,412	.....
1872	160,828	100,245	96,481	67,440	29,668	322,689	327,219	57,582	327,139	109,639	110,083	282,156	.....
1877	158,630	108,678	135,824	72,871	19,857	396,006	402,248	153,036	375,951	116,966	168,942	220,977	.....
1882	165,834	106,229	117,352	71,740	10,357	396,401	419,557	178,432	280,517	150,988	138,694	209,184	33,926
1887	192,361	103,533	108,096	81,984	10,238	466,389	469,445	395,097	316,791	194,764	205,567	270,856	71,525
1892	187,947	96,074	99,845	88,934	13,370	465,516	470,813	435,239	334,947	253,950	220,941	294,331	171,594
1897	181,875	91,239	99,682	89,314	21,076	465,525	471,869	446,444	342,189	284,024	236,915	316,787	216,343
1898	176,503	85,732	90,630	83,738	17,485	445,816	449,373	431,030	318,755	269,954	268,456	296,172	194,459
1903	173,309	86,582	90,065	83,981	16,341	443,711	446,168	434,270	314,318	272,657	264,181	292,513	195,506

The following table classifies the pupils in the various Readers in 1903, as to rural and urban schools.

	First Reader Part I.	First Reader Part II.	Second Reader.	Third Reader.	Fourth Reader.	Fifth or High School Reader.
Rural Schools	61,846	89,189	49,441	51,359	48,696	10,186
Urban Schools (cities, towns and incorporated villages)	44,904	27,370	37,141	38,706	35,385	6,165

3.—Teachers' Certificates and Salaries.

Teachers' Certificates.

Year	Public school teachers.	Male.	Female.	1st class.	2nd class.	3rd class.	Other certificates, including old County Board, etc.	Number of teachers who attended Normal School.
1867	4,890	2,849	2,041	1,899	2,454	386	151	666
1872	5,476	2,625	2,850	1,337	1,477	2,084	578	828
1877	6,468	3,020	3,448	250	1,304	3,926	986	1,064
1882	6,857	3,062	3,795	246	2,169	3,471	971	1,873
1887	7,594	2,718	4,876	252	2,553	3,865	924	2,434
1892	8,480	2,770	5,710	261	3,047	4,299	873	3,038
1897	9,128	2,784	6,344	343	3,386	4,465	934	3,643
1898	9,867	2,294	7,073	608	4,296	3,432	1,031	4,774
1903	9,456	2,160	7,296	610	4,451	3,250	1,145	4,967

Note.—Kindergarten and Night School teachers are not included in above table.

The above table shows a decline from 24.5 per cent. in 1902 to 22.84 in 1903 in the number of men engaged in teaching.

Improvement is again noticed in the increase of the number of teachers with First and Second Class certificates and of those who have attended Normal School.

Eighty-five Public School-teachers held University degrees in Arts, an increase of four over the preceding year 1902.

The following table classifies the teachers and certificates as to rural and urban schools, in 1903 :

	Public School Teachers.			Certificates.			
	Total.	Male.	Female.	1st Class.	2nd Class.	3rd Class.	Other Class.
Rural Schools.....	5,963	1,581	4,382	148	2,192	3,008	630
Urban (cities, towns and incorporated villages).....	3,498	579	2,914	467	2,259	242	515

Teachers' Salaries.

Year.	Highest salary paid.	Average salary, male teacher, province.	Average salary, female teacher, province.	Average salary, male teacher, counties, etc.	Average salary, female teacher, counties, etc.	Average salary, male teacher, cities.	Average salary, female teacher, cities.	Average salary, male teacher, towns.	Average salary, female teacher, towns.
1867.....	\$ 1,350	\$ 346	\$ 226	\$ 261	\$ 189	\$ 532	\$ 243	\$ 464	\$ 240
1872.....	1,000	380	228	306	213	628	245	507	216
1877.....	1,100	398	264	379	251	735	307	563	269
1882.....	1,100	415	269	385	248	742	331	576	273
1887.....	1,450	425	292	398	271	882	382	619	289
1892.....	1,500	421	297	383	269	894	402	648	298
1897.....	1,500	391	294	347	254	892	425	621	306
1902.....	1,600	436	313	372	271	935	479	667	317
1903.....	1,600	465	324	387	283	951	491	678	327

The average salaries for teachers in 1903 in incorporated villages, included in Counties, etc., above, were \$555 for men and \$285 for women. In rural schools they were \$372 and \$283, and in all urban schools, \$743 and \$395 respectively.

It will be noticed that the salaries are higher than in any previous year since 1867 in all cases except for men in the rural and village schools, who received considerably higher salaries in the year 1883 to 1890 inclusive.

See pages 12 and 13 of this Report for salaries in the various Counties and Districts.

4.—Receipts and Expenditure.

Year.	Receipts				Expenditure.					
	Legislative grants.	Municipal School grants and assessments.	Clergy Reserve funds, balances and other sources.	Total receipts.	Teachers' salaries.	Sites and building school houses	Libraries, maps, apparatus, prizes, etc.	Rent, repairs, fuel and other expenses.	Total expenditure	Cost per pupil.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$ c.
1867	187,158	1,161,588	831,599	1,670,385	1,098,517	149,195	31,354	190 23	1,479,182	9 67
1872	225,318	1,763,492	541,460	2,530,270	1,371,594	456,048	47,799	331 92	2,207,394	4 85
1877	251,962	2,422,432	730,687	3,405,081	2,088,099	477,898	47,539	510 45	3,073,489	6 26
1882	265,738	2,447,214	757,088	3,469,990	2,144,449	341,918	15,683	525 02	3,426,974	6 42
1887	268,722	3,084,352	978,283	4,331,357	2,458,540	544,520	27,509	711 53	3,742,104	7 59
1892	283,791	3,300,512	1,217,596	4,811,899	2,752,829	427,321	40,003	833 40	4,053,918	8 40
1897	366,538	3,361,562	1,260,055	4,988,155	2,886,081	391,689	60,585	677 35	4,016,070	8 73
1902	383,666	3,959,912	1,422,924	5,766,502	3,198,132	432,753	86,723	1,107 52	4,825,100	10 62
1903	390,156	4,263,893	1,406,957	6,061,006	3,309,998	428,817	74,000	1,264 67	5,077,869	11 27

A large increase in the government and municipal grants and in the expenditure of the Public and Separate Schools is noticed above. The latter item in connection with the decreased attendance has increased the cost per pupil from \$10.63 in 1902 to \$11.27 in 1903.

Average cost per pupil (enrolled attendance.)

	1902.	1903.
Sites and buildings	\$ 95	\$ 95
Teachers' salaries	7 04	7 35
All other expenses	2 63	2 97
For all purposes	\$10 62	\$11 27

Average cost per pupil (average attendance.)

	1902.	1903.
Sites and buildings	\$ 1 65	\$ 1 65
Teachers' salaries	12 23	12 72
All other expenses	4 57	5 14
For all purposes	\$18 45	\$19 51

The cost per pupil in the Public Schools alone will be found on pages 20 and 21 of this report, and for the R.C. Separate Schools on pages 24 and 25.

II—ROMAN CATHOLIC SEPARATE SCHOOLS.

Year.	Schools—Expenditure— Teachers.				Number of pupils attending—Number in the various branches of instruction.							
	Schools open.	Total receipts.	Total expenditure.	Teachers.	Pupils.	Reading.	Writing.	Arithmetic.	Geography.	Grammar.	Drawing.	Temperance and Hygiene.
		\$	\$									
1867.....	161	48,628	42,719	210	18,924	18,924	10,749	10,559	8,666	5,688		
1872.....	171	68,810	61,817	254	21,406	21,406	13,699	12,189	8,011	7,908		
1877.....	185	120,266	114,806	334	24,952	24,952	17,932	17,961	13,154	11,174		
1882.....	190	166,739	154,340	390	26,148	26,148	21,052	21,524	13,900	11,695	7,548	2,032
1887.....	229	229,848	211,228	491	30,373	30,373	27,824	28,501	19,608	18,678	21,818	8,578
1892.....	312	326,034	289,838	662	37,466	37,466	35,565	35,936	26,299	22,755	32,682	11,056
1897.....	340	335,324	302,169	752	41,620	41,620	39,724	40,165	27,471	26,071	36,462	18,127
1902.....	391	485,503	435,441	870	45,964	45,964	45,964	45,964	29,788	27,409	41,952	14,687
1903.....	412	472,395	424,319	896	47,117	47,117	41,117	47,117	30,212	28,609	43,658	20,559

III.—PROTESTANT SEPARATE SCHOOLS.

The complete list of Protestant Separate Schools is as follows :

No. 9 Cambridge, No. 6 Plantaganet North, No. 1 N. Tilbury, L'Original, and Penetanguishene.

They were attended by 314 pupils. The whole amount expended for their maintenance was \$3,451. Five teachers held a Second Class, two a Third Class and one a Temporary Certificate.

IV.—COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

The following statistics respecting Collegiate Institutes and High Schools will be found suggestive :

1.—Receipts, Expenditure, Attendance, Etc.

Year.	Schools open.	Teachers.	Receipts.			Expenditure.			Pupils.	Percentage of average attendance to total attendance.	Cost per pupil.
			Amount of fees.	Legislative grant.	Total receipts.	Paid for teachers' salaries.	Paid for sites and building school houses.	Total expenditure.			
			\$	\$	\$	\$	\$	\$			\$
1867.....	103	159	15,605	54,562	139,579	94,820	119,190	124,181	5,696	55	21 80
1872.....	104	239	20,270	79,543	223,269	141,812	131,360	210,005	7,968	56	28 36
1877.....	104	280	20,753	78,762	357,521	211,607	151,417	343,710	9,229	56	37 24
1882.....	104	332	29,270	84,304	373,150	253,864	119,361	343,720	12,348	53	27 58
1887.....	112	398	56,198	91,977	529,323	327,452	173,061	496,612	17,469	59	28 38
1892.....	128	522	97,273	100,000	793,812	472,029	191,108	696,114	22,837	60	30 48
1897.....	130	579	110,869	101,250	767,487	532,837	146,627	715,976	24,390	61	29 86
1902.....	134	593	105,801	112,650	832,853	547,402	144,246	769,680	24,472	58.96	31 45
1903.....	135	619	111,028	118,773	876,737	571,569	148,723	816,082	25,722	59.55	31 72

a Expenses for repairs, etc., included.

Average cost per pupil (enrolled attendance) per year :

	1902.	1903.
Sites and buildings.....	\$ 1 81	\$ 1 89
Teachers' salaries.....	22 37	22 22
All other expenses.....	7 27	7 61

For all purposes..... \$31 45 \$31 72

Average cost per pupil (average attendance) per year :

	1902.	1903.
Sites and buildings.....	\$ 3 07	\$ 3 18
Teachers' salaries.....	37 93	37 31
All other purposes.....	12 34	12 78

For all purposes..... \$53 34 \$53 27

2.—Classification of Pupils, etc.

Year.	English.					Mathematics.				Science.		
	English Grammar and Rhetoric.	English Composition.	Poetical Literature.	History.	Geography.	Arithmetic and Mensuration.	Algebra.	Geometry.	Trigonometry.	Physics.	Chemistry.	Botany.
1867	5,467	4,091		4,634	5,264	5,526	2,841	1,847	141	1,876	840	
1872	7,884	7,278		7,513	7,715	7,834	6,083	2,592	174	1,921	1,151	
1877	8,819	8,772		9,106	9,158	9,227	8,678	8,113	359	2,168	2,547	
1882	12,275	12,189		12,220	12,106	12,261	11,742	11,148	397	2,890	2,522	
1887	17,086	17,171	16,649	17,010	16,962	16,939	16,904	14,839	1,017	5,265	3,411	4,640
1892	22,530	22,525	22,468	22,328	22,118	21,869	22,229	17,791	1,154	6,601	3,710	6,189
1897	19,591	24,195	24,176	18,318	13,747	19,798	24,106	16,788	1,652	11,002	5,489	2,892
1902	21,576	24,241	23,768	23,559	14,500	21,594	22,953	16,881	1,662	12,758	5,860	9,051
1903	23,069	25,375	24,885	24,426	15,290	23,246	23,840	17,873	1,618	14,240	6,214	9,442

2—Classification of Pupils, etc.—Continued.

Year.	Languages.				Drawing.	Vocal music.	Bookkeeping and commercial transactions.	Left for mercantile life.	Left for agriculture.	Who joined a learned profession.	Matriculated.	Number of schools charging fees.
	Latin.	Greek.	French.	German.								
1867	5,171	802	2,164		676		1,283				56	67
1872	3,860	900	2,828	341	2,176		3,127	486	300	213	78	28
1877	4,955	871	3,091	442	2,755		3,621	555	328	564	145	35
1882	4,591	815	5,363	962	3,441		5,642	881	646	751	272	37
1887	5,409	997	6,180	1,350	14,295	1,955	14,064	1,141	882	791	305	58
1892	9,006	1,070	10,398	2,796	16,980	948	16,700	1,111	1,006	398	471	77
1897	16,873	1,421	13,761	5,169	12,252	160	11,647	1,368	1,153	409	652	87
1902	18,884	631	13,595	3,280	10,721	138	11,334	1,573	743	705	1,071	82
1903	18,831	602	14,522	3,229	11,619	287	12,264	1,805	844	684	851	81

The following table will be of interest regarding the occupation of parents of High School pupils, and will show the classes of our population receiving most advantages from those institutions.

Agricultural.....	8,004
Commercial.....	6,941
Mechanical.....	6,491
Professional.....	2,504
Other callings.....	1,782

V. DEPARTMENTAL EXAMINATIONS, ETC.

1. Table shewing the Number of Teachers-in-Training at County Model Schools, Normal College, Provincial Normal Schools, etc., 1877-1903.

Year.	County Model Schools.			Normal College.			Normal and Model Schools, etc.					
	No. of schools.	No. of teachers in training.	No. that passed final examination.	No. of teachers.	No. of students admitted.	Receipts from fees of Normal College.	No. of Normal School teachers.	No. of Normal School students admitted.	No. of Model School and Kindergarten teachers.	No. of Model School and Kindergarten pupils.	Receipts from fees of Normal Schools, Model Schools, and Kindergarten pupils.	Expenditure, Normal and Model Schools.
1877.....	50	1,146	1,124	.....	.....	\$ c.	13	257	8	643	\$ c.	\$ c.
1882.....	46	882	837	.....	.....	.....	16	260	15	799	13,783 50	25,780 88
1887.....	55	1,491	1,376	.....	.....	.....	13	441	18	763	16,427 00	44,888 02
1892.....	59	1,283	1,225	10	96	1,630 00	12	428	23	842	19,016 00	40,188 66
1897.....	60	1,645	1,384	12	180	4,374 00	13	407	23	832	18,797 59	45,724 12
1902.....	54	1,171	1,138	15	132	2,405 00	16	619	31	958	20,735 00	46,390 91
1903.....	55	1,148	1,123	17	127	2,110 00	25	586	36	1,067	19,866 00	56,672 96
												61,678 06

a Including those engaged in both a Normal and a Model School.

2. Entrance Examinations, 1877-1904.

Year.	No. of candidates examined.	No. of candidates who passed.
1877.....	7,383	3,836
1882.....	9,607	4,371
1887.....	16,248	9,364
1892.....	16,409	8,427
1897.....	16,384	10,502
1902.....	18,087	13,300
1903.....	19,058	13,003
1904.....	19,774	14,682

3. Non professional and Matriculation Examinations, 1904.

	District Certificate.	Part II, Junior Leaving.	Junior Matriculation, including Scholarship.	Part I, Senior Leaving.	Part II, Senior Leaving.	Commercial Specialist.
No. candidates	222	2,709	1,601	604	585	12
No. who passed	76	1,337	1,369	353	281	9
No. of appeals	1	194	39	32	42	2
No. sustained	1	89	7	0	3	1

NOTE—(a) The Part I, Junior Leaving examination was abolished in 1902.

(b) In Junior Matriculation column above, 183 scholarship candidates are included.

(c) The Commercial Diploma Part II was abolished in 1904.

VI. TEACHERS' INSTITUTES.

This table presents the work of the Teachers' Institutes for twenty-seven years :

Year.	No. of Teachers' Institutes.	No. of Members.	No. of teachers in the Province.	Receipts.				Expenditure.	
				Amount received from Government grants.	Amount received from municipal grants.	Amount received from members' fees.	Total amount received.	Amount paid for libraries.	Total amount paid.
				\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
1877	42	1,181	6,468	1,412 50	100 00	299 75	2,769 44	.....	1,127 63
1882	62	4,395	6,857	2,900 00	300 00	1,083 84	9,394 28	453 02	5,355 33
1887	66	6,781	7,594	1,800 00	1,879 45	730 66	10,405 95	1,234 08	4,975 50
1892	69	8,142	8,480	1,950 00	2,105 00	875 76	12,043 54	1,472 41	6,127 46
1897	73	7,627	9,128	2,425 00	2,017 45	901 15	12,446 20	1,479 88	6,586 84
1902	77	8,515	9,367	2,515 00	1,877 50	1,171 80	13,171 26	1,437 18	7,188 45
1903	80	8,788	9,456	2,450 00	1,884 00	1,296 85	12,521 50	1,095 55	6,736 63

The County Teachers' Associations are doing excellent work, and at a trifling expenditure. In the United States it is not unusual for Teachers' Institutes to be held for a week or longer. The work attempted is, however, somewhat like what is done in our County Model Schools.

VII. PUBLIC LIBRARIES, ART SCHOOLS, SCIENTIFIC INSTITUTIONS, ETC.

The change in the Act and Regulations requiring Annual Reports from Public Libraries to be made out to the end of each calendar year, has been complied with, and proved to be very satisfactory. The present Report is from the 1st of January to the 31st of December, 1903.

The following extracts are from the Superintendent's Report :

1. Public Libraries.

Abstract showing the Counties and Districts in which Public Libraries are established :—Addington (6), Algoma (13), Brant (7), Bruce (25), Carleton (9), Dufferin (10), Dundas (8), Durham (4), Elgin (12), Essex (8), Frontenac (7), Glengarry (3), Grenville (12), Grey (21), Haliburton (2), Haldimand (11), Halton (5), Hastings (8), Huron (18), Kent (13), Lambton (15), Lanark (13), Leeds (8), Lennox (2), Lincoln (9), Manitoulin Island (4), Middlesex (14), Muskoka (6), Nipissing (4), Norfolk (6), Northumberland (8), Ontario (12), Oxford (14), Parry Sound (12), Peel (14), Perth (8), Peterborough (5), Prescott (2), Prince Edward (2), Rainy River (2), Renfrew (9), Russell (2), Stormont (8), Simcoe (19), Victoria (12), Waterloo (14), Welland (9), Wellington (17), Wentworth (9), York (23).

Abstract showing the Progress of Public Libraries from 1883 to 31st December, 1903.

Year.	Libraries reporting.	Number of members.	Number of evening classes.	Number of pupils.	Number of reading rooms.	Number of newspapers and periodicals.	Number of volumes in libraries.	Number of volumes issued.	Total receipts.	Total assets.
1883 (April).....	93	13,672	28	1,758	59	1,540	154,093	251,920	\$ 59,716 00	\$ 225,190 00
1888 ".....	167	32,016	41	1,102	104	3,041	311,048	744,466	103,843 68	403,573 75
1893 ".....	255	84,088	41	1,117	156	4,745	510,326	1,415,867	160,556 26	685,412 17
1898 ".....	347	111,208	2	79	200	5,834	789,082	2,358,140	188,783 21	870,167 54
1899 ".....	364	121,397	2	35	200	5,839	862,047	2,547,131	198,421 20	935,975 81
1899 (December).....	371	129,713	2	47	188	5,773	918,022	2,042,904	178,642 87	966,667 88
1900 ".....	389	147,208	2	35	186	5,971	989,050	2,534,711	210,635 49	1,024,300 14
1901 ".....	415	155,361	1	19	194	6,062	1,066,117	2,668,364	225,796 29	1,080,601 77
1902 ".....	446	172,792	..	.....	191	6,044	1,140,392	2,738,590	246,315 29	1,151,877 04
1903.....	428	173,940	..	.....	186	5,982	1,164,573	2,534,228	240,941 13	1,269,605 22

428 Public Libraries (140 Free, 288 Not Free) reported for the year ending 31st December, 1903.

52 Public Libraries did not report for the year ending 31st December, 1903.

4 Libraries, which have not yet reported, were established in the year 1904.

2. Art Schools, Etc.

The following abstract shows the number of certificates awarded to Art Schools, Ladies' Colleges, Public and High Schools, etc., for drawing, painting, etc., at intervals since 1883 to 1904

Year.	Number of Art Schools, etc.	Primary Art Course.		Advanced Art Course.		Mechanical Art Course.		Industrial Art Course.	Extra subjects.
		Proficiency certificates.	Full teachers' certificates.	Proficiency certificates.	Full teachers' certificates.	Proficiency certificates.	Full teachers' certificates.	Proficiency certificates.	Paintings, etc.
1883.....	1	124	31	9	1	50	2	24	108
1888.....	57	2,977	151	13	139	10	11	165	171
1893.....	85	4,753	301	18	42	30	42	154	156
1898.....	55	3,166	149	22	75	42	31	142	151
1899.....	62	3,993	160	17	53	1	31	142	151
1900.....	47	3,130	130	13	70	57	24	148	130
1901.....	57	2,548	29	10	57	24	8		
1902.....	65	1,974	41	280					
1903.....	67	2,675	38	187					
1904.....	69	3,996	60	142					

An Order-in-Council has recently been passed that in future the Education Department is not authorized to hold examinations for Art Schools, Ladies' Colleges, etc.

3. Literary and Scientific Institutions.

These Institutions are doing good work. (See Superintendent's Report.) They have Libraries of Books relating to Arts and Science, History, etc., and several of these Institutions have Museums, which are frequently thrown open Free to the public. They give popular lectures on Science and Art, History, Literature, etc., and publish their Annual Transactions. Their chief aim is to encourage higher education among the masses, and the amount of patronage they receive is a proof that their efforts are appreciated.

GENERAL REMARKS.

I. THE REVISED REGULATIONS.

The publication of the new courses of study which are given in another part of this report constitutes the most important work of the Education Department for the year 1904. For a long time it has been felt by teachers, inspectors and other educationists that a revision of the high and public school curriculum was urgent. Many persons failed to recognize the need of that educational progress which is essential in view of the alterations which have arisen within half a century in the industrial and social relations of the people. In other countries, courses of study have been amended more frequently than in this province. This fact may be accounted for partly as a result of that centralization which has had its advantages as well as its disadvantages in Ontario.

It is well known that the main provisions of the new curriculum were before the country for a considerable time. Teachers' associations and other educational bodies discussed at various times, and at considerable length, the contemplated changes in the regulations. Much credit is due to the careful consideration of the original draft by a committee of the Ontario Educational Association. Indeed, the report of the "committee of nineteen" will be found carried out in the main. Modifications of the report were made only where expert knowledge of the conditions of the schools rendered such modifications essential. It will be found that the new curriculum opens up means for important educational development.

The new programme is set forth with a large amount of detail, and will as a consequence be very useful to teachers. Due prominence is given to subjects somewhat modern. The subjects long held as important are still retained, but nature study, art, manual training and household science receive a place in the curriculum. The obligatory subjects in the public school programme are only those which all children should take up. Specialization is, as before, relegated to the high school. It will be found that the curriculum is well suited to the conditions and probable development of the province. The preparation for citizenship is kept in view. Subjects which all pupils should understand have their proper place in the public school courses of study. In the high school the various pursuits that may be followed by students are satisfactorily recognized. The requirements for matriculation, for the non-professional examinations of teachers, and for various industrial and commercial callings, receive due recognition. Manual training, household science and art, as well as agriculture, become optional departments.

An important step in advance is that made in diminishing the number of examinations. Examinations when held by the teachers themselves have a well known value. Indeed, every good teacher holds written examinations as a regular part of his work. He is largely relieved now, however, of the evils of outside examiners. The teacher becomes more independent, and, as a result, he will have greater freedom in carrying on his work. Not less important is the greater value that will hereafter be attached to inspection. It is well worthy of note that in England where examinations have been carried much farther than in this country there has been a call for better inspection, and fewer examinations. It is felt there that the value of inspection decreases in proportion to the attention paid to examinations. Ontario may well take lessons from the experience of England.

The debate over the proper selection of studies in youth has been a long and wearisome one; but at last two propositions are to command almost universal acceptance. The first is that children and young people should study the elements of a considerable variety of subjects, such as language, mathematics, history, natural science, sanitation, and economics, not with the primary purpose of obtaining information on those subjects, but in order that they may sample several kinds of knowledge, initiate the mental processes and habits appropriate to each, and have a chance to determine wisely in what direction their own individual mental powers can be best applied. The second is that training for power of work and service should be the prime object of education throughout life no matter in what line the trained powers of the individual may be applied.

In the new programme of studies for high schools and collegiate institutes provision has been made to meet the demands of the various classes of students in the province. It is recognized that the secondary schools of this province correspond more generally to those in the United

States than to institutions of the same kind in the different countries of Europe. There class distinctions have held sway for centuries, and, as a consequence, the children of the rich and those of the poor are usually separated by being placed in different kinds of schools. In Ontario it is the rule that the sons and daughters of the mechanic and farmer may be found in the same class room with the children of persons belonging to professional callings. Side by side may be found the boy whose father works in the factory and the one whose parents are of well known intellectual or social prominence.

As far back as 1871 the important change was made in the curriculum of the high schools which recognized that the function of these institutions was not solely to prepare matriculants for our universities. It is well known that the departure then made revolutionized the condition of secondary education in the province. The high schools by becoming adapted to the wants of various classes of pupils soon became popular, and increased legislative and municipal grants were some of the results. A very valuable work of the high schools for many years has been the preparation of candidates for the non-professional requirements for teachers' certificates. The new programme still gives prominence to the preparation for matriculation, the professions and teachers' certificates. It furnishes, however, other courses in view of the many other callings to which young people have their attention directed. Provision has been made for commerce, household science, manual training, art and agriculture. It is reasonable to expect that some of these latter courses will now receive greater attention. President Hadley, of Yale University, in discussing modern purposes of schools and colleges very well remarks, that we now try to educate "students as intellectual producers and not as intellectual consumers." As late as half a century ago, a boy's course in study was not determined by his individual aptitudes. It was determined almost entirely by his social standing and, perhaps, by his unwise aspirations. "If he belonged to the trading class, he received one sort of education; if he belonged to the military class he received another sort; if he belonged to the professional class he received a third sort." Doubtless, when free education was adopted as sound in policy in a democratic country, educators were slow to recognize the changes which such recognition must inevitably bring. It is one function of the school to give each pupil a chance to have developed his special aptitudes. To give all the same training, as was formerly required, or such as is still required for professional pursuits, is contrary to modern views of education. Hence the provision for different courses of study, and hence the more numerous opportunities that are presented for benefiting the public as well as advancing the interests of the individual.

"But the fundamental consideration to be kept in view is the necessity so to organize public Secondary Education as that it shall form a constituent part of the general provision of National Education as a whole. With this in view the Board of Education would have remembered that the base of the pyramid is the public provision of Primary Education, and that public aid on behalf of Secondary Education should be so offered as to secure that the Secondary School in being shall be found to be linked organically to the Elementary School, and be in effect more or less of a telescopic development of the educationally humbler institution below it. At the other end the scope of the Secondary School should be so directed as to cause it to dovetail easily into the institutions for Higher Education above it. In a word, whilst class prejudices cannot be put entirely out of sight they ought to have been firmly subordinated, as they have been in most of the countries

of Europe, in the States, and in our own Colonies, to the demands of a genuine democratic and broadly-based scheme of National Education."—*The Schoolmaster*.

II. CONTINUATION CLASSES.

The success of continuation classes is now well assured. The experience of four or five years proves the wisdom of the provision made for giving ample facilities to school boards for extending the work beyond the requirements of the public school programme. The revised regulations give clearer recognition to continuation classes, while the responsibilities of the trustees are also increased. Continuation classes—at least those of the highest grade—may be regarded as simply small, secondary schools. Many of the provisions for high schools apply to continuation classes, and they are subject to similar examination requirements so far as concern the preparation of teachers. In 1903-4 the total number of continuation classes was 419; of these 68 were in Grade A, 45 in Grade B, 118 in Grade C, and 188 in Grade D. The total number of pupils enrolled was 4,598, and the number of teachers employed in continuation class work was 443. The grants for each school in these grades were : A, \$100; B, \$50; C, \$25; and D, \$15. The sum of \$200 was paid to a school in Grade A, if two teachers were employed, and \$300 if three teachers were engaged. The county council is obliged to give an equivalent. In some places county councils have, with creditable liberality gone beyond the minimum requirements. The trustees are generally anxious to employ teachers of high qualifications. In 1903-4, 20 teachers holding degrees in Arts from the universities were employed. There were 106 holding first class certificates, and 239 second class certificates. These institutions, at a comparatively small cost to the province, are doing excellent work.

III. SCHOOL LIBRARIES.

By a reference to appendix C, page 60, it will be seen that there has been further progress in the establishment of rural school libraries. The amount expended by trustees for books was \$8,195.70. This shows an increase over the previous year of \$1,306.68. In some counties the movement for the establishment of school libraries has been very marked. Much credit is due to our Public School Inspectors for the manner in which they have brought the question to the attention of trustees and teachers. The requirements of the new curriculum will give a further impetus to the establishment of libraries. There is a growing desire to train young children to read the best kind of literature. If pupils are left to themselves, or even to the guidance of their parents, the best choice of books will not always be made. A good library, if attached to an elementary school, becomes a powerful means of refining the taste, and enlarging the knowledge of the young. Rural schools especially should be furnished with suitable libraries. In country districts children very often have little literature in their homes and public libraries are not always available. The demand for the best works in Nature Study, Biography, History, Poetry, Agriculture, etc., can readily be met by a slight effort on the part of the trustees. When a start is made by an expenditure of some \$20.00 for books an outlay annually of ten dollars will soon secure a valuable library for the section. As trustees are recouped for half this expenditure by the Legislature it is safe to say no section, however poor, should be without a library.

It is not too much to say that if the children of our public schools do not crave for books there is something defective in their intelligence or in their training. An atmosphere of good literature is one of the best means of cultivating moral and intellectual habits. It would be a mistake to assume that the field of knowledge is to be occupied only by those who have had the advantages of a college or a high school. In every walk of life there may be found persons whose school age closed before the age of 14, but who acquired by a ready access to books a good general knowledge of what is best in English literature. Under democratic institutions citizens to be intelligent should have a fair knowledge of history, and of the institutions of the country. Fifty per cent. of all children leave school before the age of 12. It would be wrong to close the avenues of usefulness to every boy who is obliged to earn his living before completing the public school course. If an ardent desire for reading books is cultivated in our public schools the difficulties in the way of those who cannot secure a secondary education will be partly met. Books make people think, and those who do not think can scarcely be regarded as educated. The hope of becoming educated may be entertained by every child that will read. It is well known that many persons have been started in a useful career by reading a good book. The more the value of reading is prized the greater readiness there will be on the part of the ratepayers to place every possible advantage within the reach of the children attending our public schools.

It is unfortunate that so many people read few books other than novels. One object of a public school library is to remedy this evil so far as possible. If children are trained in our schools to have a taste for good literature they will not read fiction to excess. The choice of books is important. In the catalogue of books provided for use of trustees some careful discrimination has been made regarding the books recommended. The amended regulations give increased latitude for each inspectorate where the Inspector recommends a supplementary list for the approval of the Education Department. In this way the special demands of each locality may receive due recognition. It would never do to give full freedom in the choice of books for rural school libraries. The importunity of book agents would in itself prove an embarrassment to trustees. It is evident whatever books are purchased should be of a high order. It is encouraging to find the increased love for school work among children, which always arises when a good library is established. It is safe to say that within a very short time the province will take a front place in the number of schools in country districts furnished with libraries.

IV. TRAVELLING LIBRARIES.

In 1901 travelling libraries were established in Ontario. The purpose intended was to meet the wants of the new and sparsely settled districts in the Province. They have generally been taken advantage of by the men working in the lumber and mining camps. In such localities, which are generally at a considerable distance from village or well settled country district, public libraries are not accessible. The persons engaged in these operations would have difficulty in securing desirable reading matter. Each travelling library contains a set of fifty books. Since their establishment 37 sets have been sent out. The cases are marked A, B, C, etc. The places reached are as follows:

Michipicoten Harbor, Thessalon, French River, Gertrude Mines, Sudbury, Seguin Falls, Franks Bay, Cache Bay, Cartier, Cordova Mines, Carnarvon, Ausonia, Mowat, Gilmore, Edginton, Goulais Bay, Superior Copper

Mines, Searchmont, Boucherville, Markstay, Victoria Mines, Orrville, Ballast Pit No. 1, Creighton Mine, Gold Rock, Wabigoon, Blind River, Brennan, White Fish, Cutler, Nairn Centre, Massey Station, Bancroft, Rat Portage, Huntsville, Parry Sound, Barnesdale, Cobolt.

V. PUBLIC LIBRARIES.

The statistical tables show that the public library system of the province has been eminently successful. The total number carried on is 484, and of these 146 are reported as free. 52 public libraries did not report for the year 1903. The decrease in the number of new libraries is due to the wise amendment to the Libraries Act made during the 1903 session of the Legislature. The law previously allowed library boards to purchase books on credit. The evils arising from this privilege became apparent, and under the new provision grants from the Government are based only on cash payments for books.

The province is generous in the aid given to public libraries. The grant in each case amounts to 50 per cent. of the sum expended for books up to a maximum of \$200. It is doubtful if there is any country in the world where greater liberality is shown in aiding libraries than in Ontario. Our library system affords an excellent opportunity for development, and it may be assumed that progress in this field will be marked in the years to come.

Legislative aid to libraries, like aid for other departments of the public service, is given to encourage local effort. While the maximum grant is \$200.00 it may reasonably be expected that library boards which receive that amount have contributed more than as much from local sources. Indeed, as will be seen from the report, the total receipts in many places are three or four times as much as the legislative grant. The expenditures upon which the grants are based are not those for salaries, or rent, heating, etc., but for the purchase of books. Boards which expend money for books raised in this way to the extent of \$100.00, \$50.00 or \$20.00 will receive \$50.00, \$25.00 and \$10.00, respectively.

Compared with other countries the assistance given towards libraries in Ontario is exceedingly liberal. In Nova Scotia and New Brunswick no aid is given by the Government for the support of public libraries. These institutions are in the lower provinces maintained solely from local sources. In Ohio, Michigan and Wisconsin public libraries receive no grant from the legislature. A very trifling grant is given in Iowa. In Minnesota the maximum grant to a library is \$20.00. Perhaps New York State does as much as any other state of the union, but in no case does its grant to a public library exceed \$100.00. Public libraries in the United States are well supported, but this support comes almost entirely from local sources.

VI. FREE TEXT BOOKS.

The year 1904 marks the beginning of the free text book system for the rural schools of Ontario. Provision for free text books is the logical outcome of free schools. Free text books reduce the price because the school board can take advantage of the wholesale rates, and because the books will be better taken care of and used until worn out. An increase of attendance will follow. This is the experience of the United States, Massachusetts claiming an increase of 10 per cent., while the increased average attendance is even higher. With free text books the work may proceed promptly at

the opening of the school, whereas under individual ownership there is often delay in waiting until each child has secured the necessary books. The free text book plan trains pupils to appreciate and care for public property. Where proper rules are enforced the result seems to secure better care than the average child gives to his own property. Minnesota especially reports very favorably on this point, and for rural schools the experience in Michigan is very favorable. A better gradation and classification are possible since all pupils in the same class will be furnished the same text at the same time, and there will be no delay. Progress in education necessarily requires from time to time improved text books. The free text book plan makes the change easy when necessary. Free text books induce pupils to remain longer at school. When children have to procure their own text books they are often withdrawn because the parents cannot meet the necessary expenses. In England the free text book system has made great progress.

An optional law regarding free text books has been adopted in the following States:

Colorado, Connecticut, Iowa, Kansas, Michigan, Minnesota, Montana, New York, North Dakota, South Dakota, Ohio, Washington, Wisconsin.

In the following States the law is compulsory, and has, in many cases, followed several years' experience with the optional law:

Delaware, Maine, Massachusetts, New Hampshire, Pennsylvania, Vermont, Idaho, Maryland, Nebraska, New Jersey, Rhode Island.

As already intimated some states of the American Union, as for instance, Massachusetts, make the law compulsory on trustee boards. The law in that state, passed in 1883, briefly provides: "The school committee (trustees) of every city and town shall purchase at the expense of such city or town (town means the same as township) text books, and other school supplies used in the public schools, and said text books and supplies shall be loaned to pupils of said public schools free of charge, subject to such rules and regulations as to care and study, as the school committee may prescribe."

The late Hon. Frank A. Hill, Secretary of the State Board of Education, says: "The text books of our towns and cities are all selected by local boards. There is, of course, a considerable diversity of text books under the system. In Massachusetts individualism is so intense that probably any suggestion of State uniformity would not be received with favor."

Among the States where the law is not compulsory, but optional, New York may be especially mentioned. In the Empire State, although the law is only optional, nearly all the cities and many of the large towns provide free text books.

There is, moreover, another plan adopted, but only by California. The law there requires the state board of education to prepare a series of common school text books, to have them printed by the state printing office, to be bound at the state bindery. All mechanical execution is also under the supervision of the state superintendent of printing. The books are distributed by the county superintendents to teachers to sell them at cost to the pupils for cash and return the receipts to the county superintendents.

The policy in California has become so unpopular that its example, though often enquired into, has never been followed by any other State. The initial cost for the plant was exceedingly heavy, and much dead stock was accumulated. There has been an agitation for abolishing the system. The price of text books was found to be higher than when left to the trade. The example of California need only be mentioned as a warning to all Governments to avoid that kind of paternalism.

For years the Public Schools Act of Ontario gave school boards full power to provide free text books at the expense of the school section or municipality. Only a few cities (Toronto, Hamilton and Brantford) exercised this optional privilege. The law on the statute book was virtually the same as is to be found in such States as New York, Michigan, Minnesota, etc.

By an amendment to the Education Department Act of 1904 provision was made for aiding trustees who adopted the free text book system. The regulations, which will be found elsewhere, limit to rural schools the assistance given. This restriction can be well defended, in view of the large Government aid given to high schools, continuation classes, and technical education, which benefits urban municipalities. The mode of distributing grants for free text books is simple. Forms are sent to trustee boards and county inspectors, the latter reporting to the Education Department. As might be expected, only a few school sections availed themselves of the provisions of the new Act in 1904. In most cases trustees, before adopting the system, desire to ascertain views of ratepayers at the annual meeting which was not held until December. It may be expected that the introduction of free text books will grow in popularity from year to year.

It is worthy of note that the policy of Ontario in aiding by grants the free text book system is more liberal in these provisions than in the neighboring states. There, the municipalities pay the entire cost without any assistance from the State Legislature.

Regarding the cost of free text books the following figures from the report of the Toronto School Board will be of interest:

"The cost per pupil for text books on the basis of total enrollment, omitting kindergarten pupils, was 9c.

"The cost per pupil for text books on the basis of average monthly attendance, omitting kindergarten pupils, was 10c.

"The cost per pupil for supplies on the basis of total enrollment, omitting kindergarten pupils, was 9½c.

"The cost per pupil for supplies on the basis of average monthly attendance, omitting kindergarten pupils, was 10½c.

"The cost per pupil for both text books and supplies on the basis of average monthly attendance, omitting kindergarten pupils, was 20½c.

"The cost per pupil for text books, supplies and kindergarten material on the basis of total enrollment, was 20 1-5c.

"In the above statement the text books and supplies for night schools are charged against the day school pupils."

VII. HOME WORK.

Complaints have frequently been made to inspectors and trustees regarding the excessive amount of home work given to young children. It is a great mistake to make the school life of the child unpleasant by giving such lessons to prepare at home as will make school work itself unattractive. Before children enter the 5th form it would be safe to say the amount of home work should not ordinarily call for more than one hour's preparation, and in the case of pupils in the lower classes, much less time. On this subject the views of the more experienced teachers are very pronounced. The "Elementary School Teacher," Chicago, voices the sentiments of many persons who lament the practice not yet abandoned by many teachers of giving excessive home lessons to young children:

"In the development of our educational system the organization of the activities of the pupils in the home is rather behind that found in the best schools. This is partly because of the feeling that it is the school's func-

tion to utilize all the time of the pupil not actually needed for recreation, and partly because the modern home, for various reasons, does not always seem to be just the place where children are needed.

"The question of home work for children rests upon debatable ground. There are parents who expect the school to make the demand, and they are willing so to free the children from other duties that they may meet it. The picture of school boys and school girls of other days trudging along from school to home with a load of books indicative of tasks that must be worked out before next day; and from home to school with the same burden, but with problems that have been solved by the fireside—this picture is too vivid in the memory and imagination of most parents for them to realize easily that there may be a good school without such outside preparation.

"It would seem, however, as the present movement toward a unification of the interests of the home and school go forward that the school, directly, will furnish less rather than more home work for the children. If the school properly performs its function of giving the pupil a day filled with educative work, it is difficult to see why it ought still to pursue him into the period that he should have for recreation, or into the hours when he would better be asleep. After a business man has spent a day in his office or store; or, after a farmer has driven his plough or harvested his grain or cultivated his crops during the day, neither the one nor the other feels that he ought to have "home work" of the same kind. Even the well disciplined professional man knows that his "home work" should follow some new channels of thought, if he is to recuperate himself properly for the next day, and if he is to endure.

"There seems to be no valid objection to applying the same line of argument to the work of the children. In the course of a day, some six hours in length, a pupil will have, perhaps, some work in wood, clay-modelling, cooking, textiles, gymnastics, drawing and painting, with enough of reading, writing and arithmetic along with it all to keep every moment properly and fully employed. This is legitimate work, and there is plenty of it as long as it lasts. But after school, when the home takes hold, what then? In the past, when school was almost wholly a matter of books, the assignment of home work was easy. So many pages were set off to be read; so many problems in arithmetic to be solved; so many questions in geography to be answered—it was all beautifully definite and very easy.

"But conditions have vastly changed. There is not one home in a thousand that has any provision for enabling the pupil to carry forward any of the hand work that he is doing at school, even if it be admitted that he should do so. In reading we no longer use a single book, to be completed in a certain time by taking a fixed amount each day. The reading is from a library of books, large or small, and it is not easy for the home to provide the necessary conditions. In arithmetic the tendency is to solve problems when they arise, and the same principle applies to most of the subjects which used to be considered legitimate for home work. It is generally recognized now, also, that these subjects can be studied with much greater advantage and much more economically in the school, under the immediate direction of the teacher, than elsewhere. Most of the academic work of the pupils that can be done outside of school, therefore, is coming to be of an incidental and general character.

"It must not be inferred, though, that the school no longer demands a preparation for the duties with which it invests the children. It, indeed, requires a more delicate and refined preparation for work than ever before. This is true because its work is now carefully planned with a deeper appre-

ciation of child character and a truer insight into the essential things which develop it. The home influence was once considered sufficient if it sent the children to school able to say words and recite formulae. But everybody knows nowadays that that preparation is of the cheapest kind, in terms of human worth, and that it is the easiest possible to provide. The "home work" of the children that is most valuable to the modern school is not that which can be accomplished mainly by the mouthing of words, or the conning of pages, but rather by means analogous to those which send the merchant back refreshed to his store, the lawyer to his client, the minister to his pulpit, the farmer to his field—all rejoicing in a new day."

VIII. CONSOLIDATED SCHOOLS.

In previous reports of this department the advantages of the consolidation of rural school sections have been repeatedly mentioned. It is scarcely necessary to repeat the objects to be secured by having children attend a large central school instead of ungraded schools. A better classification of pupils and the employment of teachers of higher qualifications are at once assured by consolidation. Doubtless existing conditions, including the provision already made for school buildings, will for some time stand in the way of progress in this modern movement. It is not necessary, however, that consolidation should become general, in order that its advantages in certain localities may be obtained. There are many villages and small towns which might very conveniently have enlarged central schools to accommodate the children from the urban municipality, and, in addition, those from one, two, three or more adjacent school sections. Doubtless the expense may deter trustees in many places. The advantages of consolidation are, however, so apparent that the union of school sections may be expected to make progress in future.

The generosity of Sir William Macdonald by which a consolidated school was erected near the Ontario Agricultural College at Guelph will have an educating effect upon the many farmers and others who visit that institution from time to time. Last year the Education Department provided fourteen scholarships for students attending the Macdonald Institute, and an equal number are availing themselves of the same privilege this year. The training given at the institution must serve a useful purpose in preparing a number of teachers who go forth from the institution acquainted with modern systems of school organization, and the best methods of teaching such subjects as Manual Training, Household Science and Nature Study.

IX. SUMMER SCHOOLS.

The new programme of studies gives prominence to some subjects not heretofore receiving much recognition in the public school curriculum. With a view to assist teachers in acquiring a knowledge of the best methods of taking up the new subjects, summer schools have been held during the last few years. In 1902 a school was held in the Toronto Normal School, and in 1903 one was held at London, and one near Ottawa. Last year summer schools were held at Chatham, Cobourg, and Kingston. The main purposes in view were to give instruction in manual training, household science, nature study and drawing. Specialists in the different departments were appointed and each of these schools was well attended. Much benefit was derived by students and teachers in attendance. It is not, of course, presumed that such schools should take the place of the ordinary schools for

the training of teachers. The main object is to meet new conditions, and to afford teachers some training in subjects that were not taken up at the Normal Schools except of late years. In 1905 it is intended to have summer schools at London, Ottawa and Toronto. It is found that by having these institutions at the Normal Schools there are better facilities, in view of the existing appliances to cover the work required. Schools at these places, also, can be readily reached by public school teachers.

X. TEMPERANCE AND HYGIENE.

The importance of instruction in temperance and hygiene is well known. The new regulations make some changes respecting the way in which these subjects should be taken up. It has long been felt by teachers and other educationists that temperance is a virtue which, like truthfulness, honesty, industry, etc., cannot be effectively taught by books alone. The regulations make provision for proper training in "manners and morals" throughout the whole public school course. Instruction in temperance should be given incidentally from current incidents, from lessons in literature, history, etc., and especially by the example of the teacher. Good habits are strengthened by use. Instruction in hygiene should, to a large extent, be given like other departments of nature study or elementary science. Respecting the best way of teaching physiology and hygiene, the following views set forth by Dr. A. P. Knight will be found very valuable. The remarks of Professor Knight, of Queen's University, were submitted in connection with a report of work carried on last year at the Kingston County Model School. Dr. Knight expresses himself as follows:

"The special branch of work which I selected was School Physiology and Hygiene, in reality a phase of Nature Study. The selection was made because of its practical importance. I believe firmly that the knowledge of physiology and hygiene which a child can acquire during school life will contribute vastly to the preservation of his health and to that pleasure of life which is so largely dependent upon good health.

"A little consideration soon makes it clear to a medical man that the only instruction in physiology and hygiene that can be given in the first and second classes of our public schools must be limited largely to hygiene. The rules of health as stated by the best authorities in medical science must be taught, at first, dogmatically to young children. The reason for the rules cannot be understood by pupils in Forms I. and II. because the rules preserving health are based upon a full knowledge of physiology and imply a knowledge of physics and chemistry, and along with such a knowledge of anatomy as is necessary to understand physiology.

"To understand how impossible it would be to teach hygiene in any other way than dogmatically to young children it is only necessary to glance at the curriculum of any decent medical school. A medical school requires its students to spend two years on anatomy and physiology, and only after this is hygiene and sanitary science taught. Those latter are 'final' subjects in a medical course. They cannot be fully understood without a previous foundation in physics, chemistry, anatomy and physiology, and they are, therefore, placed among the third and fourth year subjects of a medical curriculum. Obviously, it would be impossible to teach young children the laws of health by approaching the subjects as the medical student does.

"The difficulty in teaching physiology and hygiene to young children is great enough, but when the teacher is required in addition to teach the ill affects of stimulants and narcotics upon the various organs of the body, he is confronted with the difficulty of teaching another 'final' subject of the medical curriculum, namely, pathology. Every rational parent and

teacher recognizes the terrible degrading effects of the excessive use of alcohol, opium and such like drugs, and the necessity of impressing upon children the horror of becoming slaves to their use, but surely this can be done without attempting to teach children the changes which are produced in the tissues by these drugs—changes which experts themselves find it difficult if not impossible, to understand.

"Manifestly then, in teaching hygiene to young children we must just accept the best teaching of medical science as regards the care of the mind and body, express this teaching in a set of simple rules, and require young pupils to memorize them. In doing this, we can only hope that children who do not continue in school beyond the Third Form or reader, may, nevertheless, be induced, after leaving school, to practice these rules of health, just as we hope that we may observe the ordinary rules of conduct and morals.

"With pupils in the Fourth Form, and perhaps the Third Form, the case is different. Here some knowledge of anatomy and physiology may be acquired by observations of parts of animals, such as can be obtained in any butcher shop. With a little trouble on the part of the teacher, the subject can be made intensely interesting to even young children, a fact which the model school students had many opportunities of seeing for themselves.

"The very first day I met the teachers-in-training, I impressed these views upon them, and said that my course of instruction to them would be guided by these principles. As regards the teachers themselves, I soon found out that they knew very little, indeed, about physiology and hygiene. A double task, therefore, was before me. These men and women had to be taught some physiology and hygiene, and, in addition to this, they had to be instructed how to teach these subjects to young children."

XI. NATURE STUDY.

The term "Nature Study" has, in recent years, been made to cover the study of plants, animals, minerals and the elementary work done in physics and chemistry. It also includes much that is ordinarily classed as physiology and hygiene, as well as geography. The term "Physiography" has long been used to designate certain phenomena included in geography which is, therefore, a very extensive subject, and one of very great importance in the programme of public schools.

The formation of habits of observation and the arousing of a love for nature will determine largely the character and extent of nature study. It includes in their proper place and season the observation of minerals, plants and animals as well as some of the more apparent physical forces. It would be a mistake if the efforts of pupils would stop with a knowledge merely of what is observed. The interpretation of natural phenomena is of more value than the mere observation of facts. At an early age the adaptation of parts of animals and plants to their uses will become an object of enquiry. It should, however, be recollected that while a love for nature is the primary end of Nature Study it cannot be reached by simply talking about the objects observed. Any drift of such lessons into mere sentimental reflections is of little value.

In connection with this new subject of the public school programme, the following remarks taken from a late Massachusetts report are valuable:

"Through the study of geography the pupils acquire a knowledge of the earth as the home of man. There are two elements, therefore, of this branch of study; first, nature, in making the earth suitable for human hab-

itation; and, second, the people, in making it a place in which all the activities of life are carried on. So far as possible, the pupils' knowledge of the earth should be interpreting knowledge, or knowledge by which they may understand the relations to human life of its various features, such as climate, surface, soil, etc.

"The facts acquired in nature study are closely related to the primary facts of geography; indeed, many of the facts of nature study and geography are identical. The subjects of study in these two branches should, therefore, be arranged in the course with reference to purposes of correlation; and where it is possible the relations should be made to appear as, for example, the effects of running water as a topic of nature study, and the study of relief forms as a topic of geography.

"The relations, also, of one or both of these branches to arithmetic and history should be indicated. Probably no subjects in the course will be found to be more serviceable for composition and for drawing than these. If these relations are not indicated in the course, opportunity at least should be afforded for abundant practice in expressing in writing or in drawing the facts acquired.

"In the lower grades resemblances and differences of the human structure and that of the lower animals should be objects of study, and in the higher grades the connection of the facts of anatomy and physiology with those of chemistry and physics should be made to appear. In all grades the relations of parts of the body to uses and of uses to health and strength should be shown."

Mr. J. W. Gibson, under the instruction of Professor Robertson, gave a series of valuable lessons in nature study to the students attending last year the Kingston County Model School. His views given below will be of value to all teachers of nature study:

"My recent experiences in connection with this work have convinced me of the fact that the best way to incorporate the nature study work as a part of our public school course is to begin with the teachers-in-training at the model and normal schools of the province by providing for them there a well regulated course in nature study. For some time past I have had opportunity to study the question from the teacher's standpoint and to observe teachers in their work, which leads me to say that it is difficult to find a teacher who is either competent to teach nature study or who is desirous of attempting it without having first had some special training or help in certain lines of nature study work. My recent experiences have confirmed my already strong belief in the nature study and school gardening work as one of the most potent agencies in the training of both teachers and pupils; in making accurate observations and in forming rational conclusions, in the formation of good habits and the development of a nobler manhood and purer womanhood, and in the acquiring of saner and broader views of life, of the relationship of the individual man to his fellow and to his God."

XII. SCHOOL GARDENS.

The development of the school garden idea has been rapid in other countries, and it may be assumed progress will be made in this direction in Ontario when the object aimed at is fairly understood. In a country like Canada, which depends so much upon agriculture, every reasonable effort should be made to create an interest in the farm. To the credit of Carleton the school garden movement has taken a fair hold of the community in that county. Regarding its success Inspector Cowley reports as follows:

"In April, 1904, five school gardens went into operation in connection with as many public schools of Carleton County. These gardens are associated with Sir William Macdonald's plans for improving Canadian schools and constitute an important factor in the general scheme devised by Professor James W. Robertson to that end. The gardens are placed at intervals of from seven to fifteen miles, thus bringing the experiment fairly under the scrutiny of the entire county. One is at Richmond village, in the heart of the county, and is three acres in extent. The others are in rural sections, at Mohr's Corners, Carp, North Gower and Bowesville, and are each two acres in area. After full discussion with trustees and rate-payers the gardens were established under authority of each school board concerned. Where additional land had to be bought the Macdonald Fund bore half the cost. The fund also undertook to prepare and equip the garden and to maintain it for three years. For the same period a travelling instructor was appointed to visit each garden one day per week for the purpose of assisting the teachers in directing the garden work of the pupils, giving instruction in certain practical aspects of nature study, and generally encouraging the association of the garden work with the ordinary exercises of the class room. There is a garden shed about ten by twenty feet for storing tools and carrying on work not suited to the class room, such as analysis of soils, selecting seeds, making labels, potting plants, etc. The chief tools and implements are hoes, rakes, handweeder, garden lines, one or two spades and shovels, wheelbarrow, saw, axe, grindstone, hammer, vise, etc.

"The general plan of laying out each garden involves (1) a belt of native trees and shrubs surrounding the grounds except at intervals where a desirable view is available; (2) a half-acre playfield for the boys; (3) a lawn bordered with shade trees for the girls; (4) a shaded walk each for boys and girls, about a hundred yards long; (5) an attractive approach to the school, consisting chiefly of a piece of open lawn with shrubs and flowers on either side; (6) a suitable reservation for individual and class plots; (7) an orchard plot or border; (8) a forest plot in which the chief native trees are grown from seed.

"As the gardens develop, an influential feature of the work will be the distribution of flowers, seeds, trees, etc., to the homes of the section. This year hot beds were made in each school garden and were managed largely by the pupils. The plants not required for the garden were taken home and in many cases the pupil's homework in gardening excelled the results he obtained in his plot at school. Exhibits of garden produce, chiefly vegetables and flowers, were made at the county fair and at two township fairs, and won about a hundred dollars in prizes given by the societies and by private citizens.

"The individual plots varied in size from six feet square to six by ten, according to the capacity of the pupil. In one garden the plots were all ten by twenty, a big pupil and a small pupil working in partnership. The chief things grown were peas, beans, beets, carrots, turnips, radish, parsnips, onions, lettuce, asters, zinnias, pansies, balsams, sweet peas, etc. The class plots were each twenty feet square, and were used for experimental work with potatoes, corn, clover, cabbage, tomatoes, etc. In the largest school two hours per week were requisite for garden work. In the other schools one hour sufficed. Experience indicates that when the gardens are fully organized the plots can be well kept by devoting two half-hours per week. The children have ample time to spare and the work of the garden is, undoubtedly, promoting their progress and intelligence in the ordinary school course.

"In the holidays the weeds gained headway in a few cases, but the pupils came to the garden for one hour per week on the average and were given credit cards for the work they did. Where the teacher conducts the garden work successfully during the foresummer, the pupils can be relied upon to look after the plots in vacation.

"Speaking broadly, the school garden has an educational, an economic, and a national aim. Educationally it affords an excellent concrete basis for much of the school work in arithmetic, language, writing, reading, and drawing. It develops the motor activities. It turns the powers of observation into the orderly channels of cause and effect. It offsets the bookishness of the class room. It awakens an interest in things that grow. It encourages work in the fresh air and the sunlight. It unfolds something of the beauty and moral spirit of nature.

"On the economic side it teaches the constituents of soil, the conditions of plant life, the value of fertilizers, seed selection, rotation of crops, tillage, etc. It also produces the best trees, plants and seeds for free distribution, and stimulates a spirit to improve the farms and beautify country homes.

"In its national aspect the school garden develops a wide interest in the fundamental industry of the country. It convinces the young mind that the work of the farmer gives scope for intelligence and scholarship, and holds out the promise that a life of industry in the country will be followed with rewards of prosperity, independence and happiness."

Other public school inspectors are also recognizing the value of school gardens, and are urging teachers and trustees to take advantage of the provisions of the regulations which will be found elsewhere in this report. Inspector Odell, of Northumberland County, has issued a circular to his teachers from which the following valuable extracts are taken:

"Those who have not looked carefully into the subject are disposed to belittle its importance and taboo the whole thing. So, if you have prejudices, be good enough to set them aside.

"We drive along the road and too often see untidy home-surroundings; too often see that sacred spot, God's acre, neglected; too often fail to see borders of flowers and flowering shrubs around neatly kept lawns.

"Good Schools Associations are being formed in some countries to revive a lively public sentiment in favor of good schools. The same revival is needed in Ontario and the same means might be used with good effect in bringing this about as well as placing our educational institutions on the highest plane.

"It seems to me that the school ground should be the hub of the section. It should be large, at least one acre, a kind of garden-park, adorned with choice Candian trees and the best known flowering shrubs and plants—a corner being kept for specimens of all wild flowers growing in the neighborhood—a place where the people of the section may have social gatherings.

"The study of nature should proceed along natural lines, and we know of no better method than the one mapped out. The opportunities in every district, rural and urban, for training of this kind, are ample. The cultivation of a taste for flowers, shrubs and trees is an important part of the education of girls and boys, who, on leaving school, should be able to identify and give the characteristic of all the best known specimens of the flora of the country. This cannot be done by book lore. It can only be done by the children coming in contact with nature daily; and, further, if we can only develop the love of a flower in the heart of a child, we have done much for that child. Avoid science. What better then to serve the pur-

pose just stated than to have all the best varieties of wild and cultivated flowers and shrubs in our school yard. And, too, if we desire to transform many of the most unattractive school-grounds into beautiful spots, special and concentrated efforts must be put forth.

"Who will be the first to carry out, in a measure, if not fully, the suggestions as outlined? Who will undertake the study of nature in this most natural way? Who will make a little sacrifice of time and convenience to begin what has proved to be of such splendid educational value? You may say, 'I am leaving the school shortly, and, therefore, it will be of no personal advantage to me.' It must be remembered that the pupils stay on at school and the best way to leave the impress of your character on them is to leave a memorial in the form of a bed of tulips, daffodils, etc., which will, by their beautiful tints, the following spring, call you back to remembrance. We all like to be remembered and that for good. We are constantly sowing for other's reaping and vice versa. We leave a good Senior Fourth Class at Christmas. The following summer the pupils do well, having shown careful teaching. The work was practically done when we left. Another teacher comes in for the reaping of the reward. So it is in every department of life."

XIII. AGRICULTURE.

In a country like ours everything that has a bearing on the interests of the farming community is deserving of close attention. The tendency for persons in rural districts to migrate to urban municipalities is not confined to Ontario. It would be foolish to attribute this movement to the development of education. Economic causes have, doubtless, most to do with the inclination to leave the country, and to settle in towns and cities. The advantages of urban life are apparent, and too often its disadvantages are overlooked. The social drawbacks of country life have, doubtless, much to do with the tendency mentioned. At the same time the growth of machinery has limited the necessary occupations of the farm. The disappearance of mechanics from the "cross roads" is due mainly to the rise of the factory. When work was done by hand more persons were required to do the work of the country. There is, besides the noticeable fact that even in household occupations many duties have disappeared, which were at one time very common. Much of the sewing, knitting, etc., is now done in the factory. Conditions have thus arisen which are now well known, and which call for consideration.

It is evident that every possible step should be taken to make farm life not only attractive, but also advantageous from an economical point of view. Education cannot do everything, but it can do a great deal. For many years the importance of properly trained teachers has been recognized by the Education Department. Under the regulations long in force instruction has been given in agriculture in all the county model schools, and in the normal schools. Every teacher authorized to teach a public school has, therefore, some training in the best methods of teaching the subject. A text book in agriculture was authorized some years ago for use in the 4th and 5th forms of the public schools. This work has proved so valuable that it became an authorized text book in Wisconsin and in some other parts of the United States. For the purpose of further encouraging agriculture and horticulture, and for the purpose of increasing the attractiveness of rural schools, regulations were framed a year ago for the establishment of school gardens. Every rural school board which provides a school garden is entitled to an initial grant of \$100, and a subsequent annual

grant of \$10. The establishment of libraries in rural schools has been another marked feature of the policy of the Education Department. A carefully prepared catalogue giving books recommended has been distributed among the trustees of various school sections. The list embraces most of the latest works in nature study, agriculture, history, biography, travel, poetry and citizenship. Up to a maximum of \$20.00 the Government gives one-half the amount expended each year for books. The recent amendment to the Education Department Act provides for free text books aided by the Legislature. Grants to the extent of 50 per cent. of the amount expended for certain text books in rural schools will hereafter be given. In these several provisions as enumerated it will be seen that the policy of the Education Department has had specially in view the needs of the farming community.

The new courses of study, to be found elsewhere will show the wise provisions made for a school programme valuable to agriculturalists. It is well known that practical farming cannot to any great extent be taught to young pupils. A more intelligent interest, however, in the processes of agriculture may be communicated and some liking for country life may be promoted. The revised courses of study give special prominence to elementary science, which lies at the basis of the study of agriculture. Nature study which embraces a great deal has received its proper place. Such subjects as animal life, the care of domestic animals, the characteristics of plants, and the caring for plants, and economic fruits receive considerable notice. The various operations of seeding, and harvesting, with the effects of climate, have a proper place in the curriculum. As the pupil advances more attention is given to the functions of plants, the care of animals, the culture of farm and garden crops, and various natural phenomena. The special courses of study for high schools constitute new, but valuable features of the curriculum for secondary education. The courses are two in number.

XIV. INSPECTION.

It was in 1871 that provision was made in Ontario for county inspectors. Previously in most places there was an inspector for each township. The change to a system of county officers resulted in a revolution in educational affairs. For over thirty years the public schools in nearly every part of Ontario have made much progress in various directions largely in consequence of the improved system of inspection. The amendment made during the last session of the Legislature by which the salaries of inspectors were increased was a just recognition of claims repeatedly made on behalf of a worthy class of educational officials. It will be remembered that the cost of living has very much advanced since county inspectors were first appointed. The qualifications also have been wisely raised. To receive an inspector's certificate now demands that the candidate must have an honor degree from a university, have taken one year's course at the Normal College and must have secured standing as a specialist. He must, besides, have had at least five years' experience as a teacher, three of which must be gained in public school work. It follows, therefore, that no one can be appointed an inspector who has not only the highest certificate of academic and professional qualification, but also who is by experience acquainted with elementary school work.

It would be a mistake to suppose that an inspector's duties have to do only with the formal inspection of schools. To be a useful officer he must be an educationist in the best sense of the term. He must be an enthusiast

in advancing the standing of the teachers in his county, in establishing school libraries, and in promoting interest in schools, among trustees and other ratepayers. His duties should not be regarded simply as those of a detective, but rather as one whose visits to the schools and addresses on education have an inspiring influence in every section of the county.

Much could be said in favor of having our inspectors appointed by the Lieutenant-Governor in Council and thus freeing them from local influences which, sometimes, interfere with their usefulness. It is doubtful, however, whether such a step towards centralization would be viewed favorably. The amended Act referred to increases the remuneration of inspectors. A great deal could be said in advance of having a fixed salary for these officers. "So much per school" is objectionable as a mode of payment. The inspector should give all his time to his duties, visiting schools not simply twice in the year, but three or four times, if the number under his supervision and their needs call for such visits. It is possible our system of examinations has too often stood in the way of healthy inspection. Regarding the relative values of inspection and examination the following opinions taken from an English educational paper are worthy of note:

"That the inspector has risen to a proper sense of his duty under the system is true. In a letter from one of the officers of the National Union of Teachers, England, to the Secretary of the Public School Teachers' Association of New South Wales, it is stated, corroborative of the above, that 'the relations between teachers and inspectors have undergone a complete revolution.' Under the examination system, public school teachers in England were often the victims of inspector's caprice, and a bad report on the day of examination meant something serious for the unfortunate teacher. 'Now,' says the same writer, 'if an assistant is not working properly it becomes the duty of the head teacher to report to the teacher's employers, whose duty it is to remove that teacher if he cannot be brought up to the mark. We find that if a teacher is so reported upon, and so removed, it occurs only after careful investigation and observation, and every opportunity is given to the teacher to improve. Under the old system teachers not infrequently were adversely reported upon, sometimes dismissed, not because their work was unsatisfactory during the year, but because the children were nervous on the examination day, or the inspector was out of touch with his work on that particular occasion.'

"The head teacher of the suburban school already referred to, since gone to his long rest, would have in his day seriously resented any attempt to return to examination as indicating an imputation on his honour or a belief that he was incompetent to manage his school. The mistress of the infants in the same school stated that the Government inspectors listened to the teaching, and observed the methods of instruction in carrying on the ordinary work according to timetable, but conducted no systematic examination, and that the board inspectors neither inspected nor examined, but were chiefly employed in making enquiry into matters of organization noted by the Government inspectors."

Extract from an article, "Inspection versus Examination," in *Teachers' Times*, London, April 17, 1903:

"The threatened relapse into examination from healthy inspection is a subject that disturbs the teacher's peace of mind. What, however, is likely to be the effect upon the children of our schools?"

"Though examination of attainments is indispensable in promoting children from class to class, it can only be done satisfactorily by one who knows the children intimately. The mind of a little child is complex, and

its growth cannot be estimated by a rough and ready scale. An outsider cannot adequately test this growth and progress; only a teacher can do that.

"The value of an outsider lies in the fact that he is, or should be, a judge of school method, and because he is in a position to compare the machinery in different schools. Teachers are isolated in their work, for there are really no practical opportunities for seeing other schools at work, consequently, there is a danger in monotony—that fatal danger—in method.

"An inspector, if he knows his work, can act as the carrier of good methods and the destroyer of inferior methods. He can develop his schools in proper directions and eliminate any tendency to go on wrong tracks. By judicious suggestions he can often give invaluable help to grateful teachers.

"Inspection, as opposed to examinations, is really a question of point of view. To those who think that all school work aims at making a child self-reliant, self-controlled, and eager to learn, inspection of methods and its effect on the pupil is best. To those who judge school and teachers' work by the intrinsic results of a test paper worked by the pupils, examination is a fetish.

"If examinations were conducted in a less rigid manner, the system would lose many of its faults. 'There is no such thing as an average child.' A child that can work four sums correctly, together with a child who cannot work any, are not equal to two pupils with two right each. Every teacher knows that, and yet rigid examination treats them as if they were. If any examiner tried to find out what children did know, instead of endeavoring to discover what was not learned, it would be better. Unfortunately, many of the old annual examinations resolved themselves into trials of strength between the examiners and the ingenuity of the teachers in cramming their poor little charges with the latest tricks of answering, and the favorite idiosyncracies of the inspector. The pitch of excellence required by individual examinations wasted the time which might have been given to mental improvement on useless parrot knowledge.

"The children could not find out things for themselves, time pressed, and very often rule of thumb methods were adopted, for, whatever happened, three sums out of four must be worked correctly.

"The very children, backward children, who need careful training in growth of mental power, and with whom all lessons should aim more at improvement of mind than ability to pass tests, are the pupils whom the new regulations propose to examine. The brighter scholars are the only pupils who can spare the time to undergo the tests.

"If a teacher does his work well, there is more real skill and industry to be expended under the inspection regime than under examination. Any coach can prepare for the latter, but it takes an educator, alert, sympathetic, and energetic for the former system. Any teacher who has relaxed his efforts under the new conditions has failed grievously towards his pupils, his fellow teachers, and himself.

"In accuracy and neatness of work there is very little difference between now and the examination period. But the difference, which was an artificial inflation, represents no worrying of the poor dunces, but kindly helpful teaching, no intolerable strain for the teacher, and a magnificent step towards true education in the primary school."

A member of "The Mosely Commission" says:—"To quote President Roosevelt, 'America has the advantages in a broader and sounder base of general education, but in England there are loftier pinnacles of individual

attainment.' The difference is due to difference of aim, and this again to difference of external conditions. Our schools are dominated by outside examinations, and organized for the winning of certificates and scholarships. The public judges their success by the number they win; the masters knowing that this is the test on which their professional reputation depends, are forced in self-defence to concentrate their attention on the picked pupils, and to keep up the pace in class work which will give their powers full scope. While the ultimate goal is still far off, a more immediate stimulus is supplied in the class prize. The ordinary pupil thus finds the work proceed at a rate with which he cannot keep up, while the prize the immediate goal of ambition, he knows to be utterly beyond his reach, however hard he works. Naturally he soon gives up the struggle, and resigns himself to the conviction that headwork is not for such as him. From this incubus the American schools are remarkably free. Everywhere there is State or university control, but it takes the form of inspection rather than of examination. There are few scholarships; indeed, the need of them is little felt; the high school course is free, and at the universities a healthy social tone combined, in many cases, with an extended summer vacation, makes it customary for the poor student to earn enough before the session begins to pay his way through it. Where scholarships do exist, they are usually awarded without examination. Thus, at Harvard and Yale, the award is on enquiry; at Michigan and Chicago scholarships are attached to the accredited high schools of the university district either (as within the City of Chicago) one to each school, or a number to a group of schools, but in the latter case they are awarded in rotation, and there is no inter-school competition. In a few cases the award is on examination, but in most either on enquiry by the university faculty or on recommendation by the high school Principal.

"Add to this freedom from the pressure of external competition an almost complete absence of class prizes and all the machinery of class competition, and it is not difficult to understand why the pupil of moderate abilities follows the class work with so much more interest in America than he does in England. The aim of the American school is the education of all; that of the English, the instruction of the few."

Sir John Gorst, M.P., writes: "I greatly regretted the relapse of the London School Board into the primitive plan of examination as a test of schools and school work. The consequence of such a system is that children cease to be educated, and instead are only prepared for examinations. To test either the character of the school, or the ability and industry of the teacher by such a method, is, in my judgment, a most unwise step, disastrous to real education."

Mr. Oscar Browning, M. A., Principal of the Day Training College, Cambridge, writes: "I am of opinion that the introduction of inspection instead of individual examination in the estimate of school efficiency was a great improvement, and I should regard any return to the old system as a retrograde step."

Dr. Waller, Westminster Training College, writes: "The effects of the system generally were most disastrous involving the worst forms of over-pressure. The tone, the activity, and ideal happiness of school life were lowered. The attention was concentrated on bringing up every child to the minimum standard demanded. School life became irksome, and learning was abandoned as soon as the scholar left school. Many of the ablest teachers abandoned the profession in sorrow and disgust. Their ideals had vanished. They objected to become mere 'Code grinders.'"

An English Inspector in one of his late reports says: "The old examination stimulus has been withdrawn, and the teachers are not yet able

to make the best possible use of the liberty that has been given them. It is probable that the schools, taken as a whole, are neither as efficient as they were two or three years ago nor as they will be two or three years hence. But this is not a matter of great importance; what is of importance is the growing tendency in elementary, as in every other grade of education, to do everything for the pupil, to coddle him, to spoon-feed him, to tie him to his nurse's apron and to keep him in leading strings, to direct his studies for him, to arrange his amusements for him, to fill up his leisure for him, in short, to do everything for him except what is of all things most truly educational, viz., to leave him to his own devices, and throw him upon his own resources. If we do not do for a pupil what he ought to do for himself, we certainly hold his hands for him while he is doing it."

XV.—WOMEN TEACHERS.

As will be seen from table 3 of Public Schools, page IX, the total number of teachers employed in the Public Schools in 1903 was 9,456, of whom 7,296 were women. The percentage of men in the profession is steadily declining. In 1867 the percentage of men was 58.26. In 1877, 46.69; in 1897, 30.5, and in 1903, 22.84. The conditions and causes are worthy of thought. Several members of the Mosely Commission who visited the United States in 1903 called attention, and in most instances disapprovingly, to the preponderance of women teachers. The situation on the other side is pretty well known. As regards the elementary schools, "the passing of the schoolmaster" has long been noticed. If the tendency were confined to the lower classes of the Public Schools, it might not be regarded as a disadvantage. In the United States the number of men teachers employed in the High Schools has decreased relatively from year to year. Fortunately for Ontario matters are not so bad. In our High Schools and Collegiate Institutes the proportion of women teachers has not become so great as to sause much alarm. It is to be regretted, however, that in many urban schools there has been too great a disposition to employ, even for the more advanced pupils, women teachers. Frequently one will hear it said that the work of the woman is as good in the school as that of the man. Doubtless those who use this line of argument regard the school as simply a means not of training but of receiving knowledge. If passing pupils at examinations were the measure of a teacher's success, it may be difficult to meet the argument advanced. Character building is the main object the teacher should have in view in instructing his pupils. It is unreasonable to think that for large boys a woman is as competent as a man. The trouble arises from false views of economy. If proper discipline is to be exercised, that force of character which a well trained male teacher should possess, is essential.

In our High Schools and Collegiate Institutes there should be some lady teachers in view of the large number of girls attending those institutions. It is doubtful, however, if there should be in a High School more than one woman teacher for every two men. Boys in the higher classes of graded public schools should be taught by men. It would be well, also, if in a country school having two teachers the principal were a man. Some persons deplore the departure of the "schoolmaster" in rural districts. It should be recollected, however, that in nearly all country schools the pupils are young children where a woman is better fitted to have charge of them. No longer do young men as formerly attend country schools. Young men living in the country should already be at their life's work, unless prosecuting their studies which would find them in the high school or college.

The entire question is one of importance in view of the formation of character. If trustees are willing to give proper salaries, the difficulty will be readily met.

The following opinion from an English educationist, Hon. R. B. Haldane, M. P., will be of interest:—"Germany errs on one side of this subject, and the United States appear to err on another. A striking feature in the report of the Mosely Commission on American education is the testimony of the witnesses as to the undue extent to which women have become the teachers of young men in the United States. 'In both secondary and elementary schools 'teacher' has almost become feminine, and in the newer universities large numbers of women are to be found among the teachers. While it is undoubtedly a good thing to have women teachers in the ranks of the profession, and while, as one parent put it, 'it is better to have one's children taught by first-rate women than by fourth or fifth-rate men', it cannot be desirable, at least in the higher branches of education, that the number of women should preponderate over the number of men. It cannot, for instance, contribute to the virility of a nation for a large number of boys to be taught and guided almost entirely up to the age of eighteen by women, as is the case in some of the States.' Now the problem which has arisen in America is on its way to become a practical one here. The local authorities are experiencing increasing difficulty in obtaining competent male teachers. This has been notably an experience of the educational authority in London. There is probably a general increase in the tendency to employ women to teach boys. It has not yet gone far with us, and it is probably legitimate and desirable so far as the elementary school is concerned. But we have to steer between the Charybdis of the United States on the one hand, and the Scylla of Germany on the other—at all events, if certain elements in the formation of character are to be developed in our general educational system. And the elements in question are not only those which are concerned with the courage which is half physical and the daring spirit of the ruler of men. The duty and spirit of citizenship is more and more becoming recognized as something the sense of which can be imparted early. Here again the man seems to be the true teacher of the man. I am far from underrating the fine influence which women may exercise; but in the school, as in the church, the leader who is most likely to influence and mould the youth into accepting him as a leader (and teachers ought to lead their pupils) is the man."

Superintendent Wm. H. Maxwell, of Greater New York, thus expresses himself:—"Attention has recently been attracted by the report of the Mosely Commission to what has been called the feminization of American schools, because the great majority of public school teachers are women. It was an economic reason, in the first instance—the fact that women work for smaller wages than men—that led to the present preponderance of the feminine element in the teaching force. It is more than doubtful, however, whether American schools and American education have deteriorated in consequence. It is quite certain that the refined woman of to-day who has been thoroughly trained is a much better teacher than the coarse, ignorant, pedantic schoolmaster of fifty years ago, who excited no feeling but contempt, hatred or terror in the breasts of his pupils. We all believe in the salutary influence of the masculine mind in teaching, particularly in the case of older pupils, but we also believe that the influence of a strong woman is better than that of a weak man; and that a woman teacher of ability who is devoting her life to educational work is apt to be a better teacher than the male fledgling who takes up teaching as a makeshift, and whose mind is set, not upon education as a career, but upon law or medicine. In short, to increase the efficiency of the public school teaching force

by increasing the number of efficient men teachers—men who would devote their lives to the work—would involve a largely increased expenditure of money, in order to induce such men to make teaching their life work.”

XVI.—FUNCTIONS OF THE SCHOOL.

The main function of the school is not to furnish knowledge, or to lead pupils to acquire knowledge themselves. Information is valuable only when it has developed strength and formed character. To train children that they may become good citizens is the chief duty of the teacher. In securing this object the personality of the one who trains is of the first importance. Fortunately the teachers of our high and public schools are in most cases men and women of high character. Professional ability is, however, needed and this calls for no small amount of academic attainments, as well as systematic training in the best methods of the teacher's art. It is a wrong impression to suppose that a narrow curriculum will serve the purpose of the ordinary child. To know how to take his part in industrial or commercial pursuits demands training in a variety of subjects. In a democratic community young men should know how the country is governed. They should be trained in the best habits and taught to prefer the right and to reject the wrong. A well conducted school is a powerful agency in preparing boys and girls to take their part in life's battles. The wisdom of school expenditure can be best determined by its results. The problem of education is not a simple one. Indeed the science of education is in many respects still in a state of evolution. If improvements are to be made, they can come only from careful observation by educational experts, and with liberality on the part of those who contribute to the support of school or college.

Mr. Rathbone, a member of the Mosely Commission, says of the schools of the United States :—

“The problem which the American educators seem to me to be attempting to solve is, how to give the children those qualities which will make them good citizens and competent workers, men and women who will be resourceful, self-reliant, and adaptable, who will be able to observe accurately, record their observations correctly, compare, group, and infer justly from them, and express cogently the results of these mental observations. They desire, no doubt, that in addition to these qualities and others that might be mentioned, the children should have sufficient knowledge to enable them to deal effectively with the problems which they will have to face in after life, but it is the qualities and not the knowledge to which they appear to attach the most importance. What the boys and girls are, not what they know, when they leave school appears in their consideration to be of the first importance. It is useless they say to teach children to read if you do not also teach them why and what to read, and if, when they leave school they have no desire to read anything of an improving character. They desire of course that the boy shall have the knowledge as well as the qualities, and they hope, no doubt, before long to be able to so alter their teaching methods as to effect both objects, but in the meantime they think it is better to concentrate all their efforts on the formation of character, even if in so doing they may give but little knowledge, as when a child leaves school, if he has been rightly trained, he will soon acquire most, if not all, of the knowledge needful to him. I do not think it can be doubted that no small measure of success has attended the efforts of American educators to attain this end.”

The importance of training is also set forth in the introduction to the new school code for the English schools :—

"The purpose of the Public Elementary School is to form and strengthen the character and to develop the intelligence of the children entrusted to it, and to make the best use of the school years available, in assisting both girls and boys, according to their different needs, to fit themselves, practically as well as intellectually, for the work of life.

"With this purpose in view it will be the aim of the school to train the children carefully in habits of observation and clear reasoning, so that they may gain an intelligent acquaintance with some of the facts and laws of nature; to arouse in them a living interest in the ideals and achievements of mankind, and to bring them to some familiarity with the literature and history of their own country; to give them some power over language as an instrument of thought and expression, and, while making them conscious of the limitations of their knowledge, to develop in them such a taste for good reading and thoughtful study as will enable them to increase that knowledge in after years by their own efforts.

"The school must at the same time encourage to the utmost the children's natural activities of hand and eye by suitable forms of practical work and manual instruction; and afford them every opportunity for the healthy development of their bodies, not only by training them in appropriate physical exercises and encouraging them in organised games, but also by instructing them in the working of some of the simpler laws of health.

"It will be an important though subsidiary object of the school to discover individual children who show promise of exceptional capacity, and to develop their special gifts (so far as this can be done without sacrificing the interests of the majority of the children) so that they may be qualified to pass at the proper age into secondary schools, and be able to derive the maximum of benefit from the education there offered them.

"And, though their opportunities are but brief, the teachers can yet do much to lay the foundations of conduct. They can endeavor, by example and influence, aided by the sense of discipline which should pervade the school, to implant in the children habits of industry, self-control, and courageous perseverance in the face of difficulties; they can teach them to reverence what is noble, to be ready for self-sacrifice, and to strive their utmost after purity and truth; they can foster a strong respect for duty, and that consideration and respect for others which must be the foundation of unselfishness and the true basis of all good manners; while the corporate life of the school, especially in the playground, should develop that instinct for fair-play and for loyalty to one another which is the germ of a wider sense of honour in later life.

"In all these endeavours the school should enlist, as far as possible, the interest and co-operation of the parents and the home in an united effort to enable the children not merely to reach their full development as individuals, but also to become upright and useful members of the community in which they live, and worthy sons and daughters of the country to which they belong."

The following resolutions passed at the recent meeting in Winnipeg by the Dominion Educational Association show the trend of educational opinion in Canada:—" (1) In a country like Canada, which recognizes no class distinctions, it is the duty of the State to utilize for the general good the various useful faculties possessed by each member of the community, and with this object in view, all our high schools should be free, and no imposition of fees should become a barrier in securing the privileges of secondary schools; our universities also should be so generously supported as not to close their doors to students who are not children of wealthy parents."

"(2) The formation of character should be the chief aim to be kept in view in all efforts to advance the work of the school. Knowledge and education are not identical. Moral training should form the most important part of the teacher's duties. Instruction in morality should be mainly incidental rather than formal, and the use of a text book for the purpose is secondary in value. The best teacher is the one who is the best disciplinarian, and the personality of the teacher should be the highest desideratum. If better moral training is to be given in our schools, the object can be secured only by demanding teachers of high qualifications."

"(3) This Association desires to impress upon the attention of Canadians the importance of education as a question which lies at the basis of democratic institutions, and would urge greater liberality of expenditure on the part of provincial and municipal authorities in support of Elementary, Secondary and Higher Education. While our country is advancing in material prosperity, it is essential to the growth and stability of our institutions that all classes of citizens should more fully realize the value of the intellectual and moral development of our population."

"(4) Patriotism should continue to form a prominent feature of the instruction given in all our schools, and pupils should be trained to have an intelligent appreciation of those advantages which Canadians as citizens of our great empire enjoy. In fostering a love for British institutions, military achievements should not be set forth as the chief factors which have contributed to the grandeur and glory of the nation. Children should be trained in all those habits which promote good citizenship, and taught to realize that the highest examples of courage, self-control and usefulness are not associated with war."

XVII.—EXPERT KNOWLEDGE IN SCHOOL ADMINISTRATION.

President Charles W. Eliot of Harvard University, in an address, "The Function of Education in Democratic Society," delivered before the Brooklyn Institute, October 2, 1897, said, among other things:

"Confidence in experts, and willingness to employ them and abide by their decisions, are among the best signs of intelligence in an educated individual or an educated community; and in any democracy which is to thrive, this respect and confidence must be felt strongly by the majority of the population. In the conduct of private and corporation business in the United States the employment of experts is well recognized as the only rational and successful method. No one would think of building a bridge or a dam, or setting up a power station or a cotton mill, without relying absolutely upon the advice of intelligent experts. The democracy must learn, in governmental affairs, whether municipal, State, or national, to employ experts and abide by their decisions. Such complicated subjects as taxation, finance, and public works cannot be wisely managed, by popular assemblies or their committees, or by executive officers who have no special acquaintance with these most difficult subjects. American experience during the last twenty years demonstrates that popular assemblies have become absolutely incapable of dealing wisely with any of these great subjects. A legislature or a congress can indicate by legislation the object it wishes to attain; but to devise the means of attaining that object in taxation, currency, finance, or public works, and to expend the money appropriated by the constituted authorities for the object, must be functions of experts. Legislators and executives are changed so frequently, under the American system of local representation, that few gain anything that deserves to be called experience in legislation or administration; while the few who serve long terms

are apt to be so absorbed in the routine work of carrying on the Government and managing the party interests, that they have no time either for thorough research or for invention. Under present conditions, neither expert knowledge nor intellectual leadership can reasonably be expected of them. Democracies will not be safe until the population has learned that governmental affairs must be conducted on the same principles on which successful private and corporate business is conducted; and therefore it should be one of the principal objects of democratic education so to train the minds of the children, that when they become adult they shall have within their own experience the grounds of respect for the attainments of experts in every branch of governmental, industrial, and social activity, and of confidence in their advice."

Dr. Draper, the newly appointed Commissioner of the State of New York, says:—"If the department is to be an uplifting and aggressive force in the educational activities of the State, its time and productive energies cannot be occupied almost exclusively with routine, or with questions and difficulties arising out of routine. If the teachers of New York are to advance in professional enthusiasm and in teaching power, they must be trusted more, encouraged to exercise larger independence, and left to more of their own resources concerning the relations of teaching and examining. If the examinations are to be just to the children of the State, they must consume less time, they must bind thought less and leave nature's inclinations more latitude, and the papers must be more deliberately rated by men and women of wider experience and outlook. If the educational system is to be of real advantage to the people, it must be within the comprehension of men and women who are ordinarily intelligent and would like to understand it."

A couple of years ago an important commission was appointed by the Government of New South Wales to examine into the educational features of the leading countries of Europe and America. The commissioners visited Great Britain, France, Germany, Sweden, Italy, the United States, Canada, and some other countries. The report issued is a very comprehensive one, and the views entertained regarding the question of the best method of administering educational affairs are very suggestive. Regarding the direction of education by the Government the following opinions are expressed:—"Under any scheme of Government the political policy and general aim of a Department of Public Instruction must necessarily devolve upon a Minister acting under the authority of Parliament. Education is, however, so special a subject that no Minister would claim to be an expert therein, and therefore a comprehensive educational scheme for any State needs to be shaped as regards its general technique and details by a well directed and far sighted policy of development. This must proceed from some individual having a commanding knowledge of modern education, and of modern educational method. In the nature of things a Minister cannot devote sufficient time to become an educational expert of the highest order himself, nor is that his appropriate function, either here or elsewhere, so that although the Minister must ever control the great questions of departmental policy which represent the decisions of the State as regards the whole issue, the realization of the educational system requires that the chief administrator shall be really director of education. The direction must necessarily aim at the perpetual embodiment of such advances and improvement of method as the total experience of mankind shews to be necessary and must be that of an expert who thoroughly understands the educational systems of the world, and the special needs of our own territory. An educational system cannot be a patchwork production, it must

have organic unity if we are ever to have education equal to that of the greater countries of Europe."

The value of expert knowledge in school matters so long advocated in the United States is set forth in the following resolution passed at the National Educational Association of the United States last summer:—"We would direct attention, therefore, to the necessity for a supervisor of ability and tact for every town, city, county, and state system of public schools. Not only are leaders needed in this position who can appreciate and stimulate the best professional work, but qualities of popular leadership are also demanded to the end that all classes of people may be so aroused that every future citizen of the Republic may have the very best opportunities for training in social and civic efficiency."

In the last report of the Superintendent of Education for the Province of Nova Scotia, the following language indicates the same need in all departments of education for trustees, municipal councils and other public bodies guiding their actions by the opinions of experts:—"Every school section, according to law, must have one expert head, a duly licensed teacher who may be known as the principal, or when there are so many schools that his time is taken up mainly with supervision instead of teaching, as the supervisor. It was found to be necessary for the purpose of properly co-ordinating the work in the several departments, and especially for the purpose of unifying the statistics of the school section in the "returns" to the Education Department.

"This principal or supervisor is also made the official adviser of the school board, and is expected to be present at all ordinary meetings of the board as the representative of the teachers for the purpose of giving information to the board, and so that he may fully understand its policy and and thus be better able to direct the teachers under his supervision. The members of the school board should be careful on the other hand to obtain the views of the principal on all school matters; for no matter how intelligent they may be in their own business affairs, they cannot be expected to understand fully many things to which the teacher only can be alive. After having all the information and advice which the principal can give, the members of the school board then have the right to decide according to their own judgment what shall be done. The principal has no vote, merely an opportunity for giving information and discussing the bearings of any proposed action. When a school board does not feel like inviting the principal to be present with them for the mutual consideration of affairs coming within the purview of Regulation 23, the logical course is to get another principal. . Otherwise an appeal against their decisions may be effectively made."

It is well known in Ontario that the best managed collegiate institutes and high schools are those where the school boards secure the appointment of principals of good administrative ability, and act upon their advice in all matters pertaining to the selection of assistant teachers, and any other question of general administration for which expert knowledge is essential. In rural districts as well as in urban municipalities the judgment of the public school inspector is closely followed by trustee boards, and other local authorities that have to do with education. It would be difficult to overestimate the value to our high and public schools of the knowledge, discretion and enthusiasm displayed by inspectors and principals.

XVIII.—TEACHERS' CERTIFICATES.

To supply our schools with teachers well qualified is always one of our most perplexing problems. Circumstances have made the question a serious one for Ontario. There is at present a greater dearth of teachers of

high qualifications than there has been for many years. The scarcity of teachers has invaded the secondary schools. The Education Department has been obliged under the provisions of Regulation 37 (2) to issue a number of temporary certificates to assistant high school teachers. The number of temporary certificates granted to public school teachers within the last year is unusually great. The conditions call for an intelligent examination of the whole situation. It is clear the teaching profession does not furnish inducements sufficiently tempting to warrant young persons in incurring the expense necessary to become qualified. The salaries paid, though slightly in advance of some previous years are exceedingly low when compared with what is paid to persons in other callings of life. The expense of living has increased without a corresponding increase in the remuneration paid. The salaries paid young women in our public schools have not at all advanced in proportion to the increased wages paid to persons in other occupations. The difficulty of obtaining the higher grades of certificates, and the poor remuneration paid have caused very few of our teachers to aim for first class certificates. The summary I (3) given on page IX is far from encouraging. In response to a circular sent out to inspectors this year (1905) the facts are discouraging, but the needs of our schools warrant that the true condition should be known. It appears that this year the number holding first class certificates in our public and separate schools is only 613. The number holding second class certificates 3,976. There are 2,682 holding third class certificates; 624 holding extensions or renewals of third class certificates; 56 are teaching on Old Country Board certificates. There remain 535 who hold only District certificates, and 336 holding only temporary certificates. 422 appear not to hold any legal certificates of qualifications. These, however, are mostly teaching in Separate Schools, and will doubtless soon qualify in view of the recent decisions of the court. The certificates of 170 are not reported. From these figures it is clear a great many children in our public and separate schools are not taught by teachers with good qualifications. What then should be done? This is the problem to consider. Is the province right in adhering to the present method of distributing the legislative grant? Schools employing teachers holding only district certificates receive at present the same share of the grant as those employing first class teachers. Should a school which employs a teacher holding only a district certificate receive any share of the legislative grant? Has not the time come when a mode of distributing the \$240,000 annually paid should be placed upon a different basis? This is a question for the legislature to deal with.

XIX.—UNIVERSITY DEVELOPMENT.

The report from the authorities of the University of Toronto show the continual progress of that institution. The facts mentioned in the report which is given in Part 2 will pay a careful examination. The growth of our highest seat of learning is most encouraging. The province must, however, realize that much larger expenditures are necessary if modern conditions are to receive due recognition. The constitution of the University, including its organization and management, is one which will call for consideration at an early date.

The report of the School of Practical Science shows how another department of higher education has grown to very large proportions. The new Science building, including the necessary equipment and additions to the staff, cannot be maintained without increasing the demands upon the legislature.

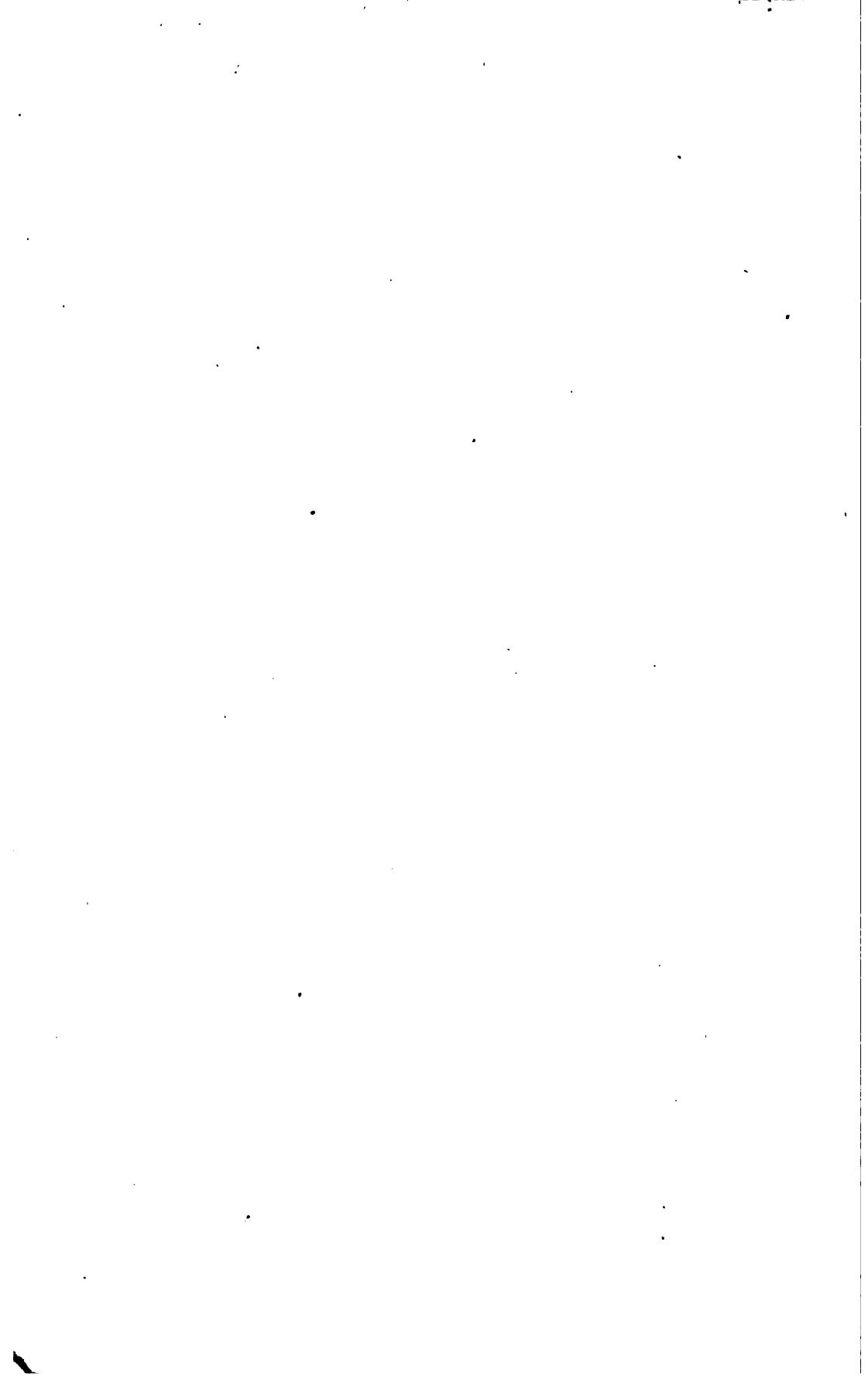
XX.—CONCLUSION.

The remarks given in these pages refer to some of the questions which engaged the attention of the Education Department during the last year. Much the greater part of the statistics and discussions of educational questions were prepared before the undersigned took charge of the Department. For various matters connected with the work of our schools the reader must refer to the statistical tables. The future presents a variety of topics demanding the attention of leading educationists of the province. All our schools of to-day show the development of half a century. Canada scarcely yet realizes its magnificent resources, and does not fully appreciate the possibilities before us if the advantages of school and college are brought home to our young people. Fair discussion is always in order. To conceal defects is the reverse of wisdom. I have had charge of the Department only for such a short time that it would be unexpected or unbecoming on my part to indicate the various directions in which improvement is necessary. Perhaps it will be as well for me to mention at present only one question, the importance of which has been clearly brought before me. This question—a far reaching one—is that of elevating the status of the teacher, and thus making educational effort more effective in every school, college and university of the land. The advice and assistance of teachers, inspectors, university professors and other educationists, I have reason to believe will not be lacking. With their assistance I may reasonably hope that fair progress will continue.

R. A. PYNE,
Minister of Education.

Education Department,
Toronto, April, 1905.

APPENDICES.



APPENDIX A.—STATISTICAL TABLES.

THE PUBLIC SCHOOLS.

I.—Table A.—School Population, Attendance, etc.

Counties, (including incorporated villages but not cities or towns) etc.	School population between 5 and 21 years of age.	Pupils under 5 years of age.	Pupils between 5 and 21 years of age.	Pupils over 21 years of age.	Total number of pupils attending school.	Boys.	Girls.	Average daily attendance of pupils.	Percentage of average to total attendance.
1 Brant	3,778	7	3,056	1	3,064	1,620	1,444	1,653	54
2 Bruce	13,153	18	10,445	5	10,468	5,398	5,070	5,825	56
3 Carleton	8,468	54	6,637	4	6,695	3,525	3,170	3,433	51
4 Dufferin	4,985	23	4,443	5	4,471	2,299	2,172	2,025	45
5 Dundas	5,308	25	4,226	1	4,251	2,185	2,066	2,383	56
6 Durham	5,099	10	4,431	1	4,442	2,248	2,194	2,416	54
7 Elgin	6,735	12	5,796	1	5,808	3,013	2,795	2,733	47
8 Essex	10,231	17	6,425	2	6,444	3,300	3,144	3,174	49
9 Frontenac	7,048	26	5,539	2	5,588	2,902	2,686	2,421	43
10 Glengarry	4,300	47	3,754	1	3,781	1,933	1,848	1,781	44
11 Grey	15,342	82	12,760	10	12,852	6,638	6,214	6,400	49
12 Haldimand	4,856	10	3,633	1	3,643	1,909	1,734	2,265	62
13 Haliburton, N.E. Muskoka, S. Nipissing & E. Parry Sound	5,764	26	4,937	1	4,963	2,536	2,427	2,179	44
14 Halton	4,416	8	3,278	2	3,280	1,696	1,584	1,765	53
15 Hastings	12,147	44	8,741	4	8,789	4,507	4,282	4,408	50
16 Huron	13,895	10	10,017	4	10,031	5,238	4,793	5,787	67
17 Kent	9,541	19	7,909	1	7,929	4,129	3,800	4,089	61
18 Lambton	11,119	8	9,130	1	9,139	4,819	4,320	5,221	57
19 Lanark	5,741	17	4,270	1	4,287	2,170	2,117	2,483	58
20 Leeds and Grenville	10,451	39	8,732	2	8,773	4,485	4,288	4,691	53
21 Lennox and Addington	5,112	1	4,163	2	4,166	2,168	1,998	2,200	62
22 Lincoln	3,994	16	3,635	1	3,650	1,927	1,723	1,952	53
23 Middlesex	11,417	9	8,771	1	8,781	4,541	4,240	5,121	58
24 Norfolk	7,027	24	5,406	2	5,432	2,760	2,672	2,870	53
25 Northumberland	7,044	6	5,657	1	5,663	2,933	2,730	3,091	55
26 Ontario	7,851	8	6,737	2	6,747	3,560	3,187	3,573	53
27 Oxford	8,700	...	6,729	2	6,731	3,570	3,161	3,706	55
28 Peel	4,965	...	3,764	1	3,764	2,024	1,740	1,866	50
29 Perth	8,540	18	6,188	1	6,207	3,277	2,930	3,815	61
30 Peterborough	6,508	21	5,105	1	5,126	2,645	2,481	2,448	48
31 Prescott and Russell	11,993	28	5,141	4	5,173	2,547	2,586	2,522	49
32 Prince Edward	3,245	20	2,628	2	2,650	1,359	1,291	1,408	53
33 Renfrew	10,776	23	4,416	12	7,440	3,868	3,631	3,337	45
34 Simcoe and W. Muskoka	17,522	23	14,952	11	14,986	7,118	7,732	7,732	52
35 Stormont	4,982	33	3,942	1	3,976	2,090	1,886	2,033	51
36 Waterloo	8,284	38	6,768	5	6,811	3,536	3,275	3,268	48
37 Welland	7,471	7	5,479	2	5,488	2,967	2,521	3,414	62
38 Wellington	6,303	13	5,157	1	5,171	2,661	2,510	2,654	51
39 Victoria and S. E. Muskoka	11,153	12	7,888	1	7,920	4,175	3,745	4,420	56
40 Wentworth	5,405	12	4,697	1	4,709	2,480	2,229	2,607	53
41 York	13,696	16	11,284	1	11,300	6,010	5,299	5,873	52
42 Rainy River and Thunder Bay Districts	2,181	...	1,775	...	1,775	898	882	736	41
43 Algoma and Manitoulin	7,276	34	6,082	6	6,072	3,066	3,006	2,889	47
44 N. Nipissing, etc., and W. Parry Sound	*8,087	22	5,385	4	5,421	2,709	2,712	2,352	43
45 Moose Fort	30	...	19	...	19	9	10	9	47
Totals	351,999	905	272,876	95	273,876	142,174	131,702	142,917	52
1 Belleville	2,142	...	1,299	...	1,299	667	632	834	64
2 Brantford	2,693	...	2,562	...	2,562	1,290	1,272	1,877	73
3 Chatham	2,586	...	1,543	...	1,543	771	772	1,987	64
4 Guelph	3,320	...	1,702	...	1,702	855	847	1,229	72
5 Hamilton	14,334	...	8,114	...	8,114	4,142	3,972	5,953	73
6 Kingston	5,674	...	2,374	...	2,374	1,175	1,199	1,312	80
7 London	9,561	...	6,675	...	6,675	2,837	2,838	4,040	71
8 Ottawa	16,747	...	1,898	...	4,898	2,509	2,389	3,406	70
9 St. Catharines	2,960	...	1,459	...	1,459	689	770	1,020	70
10 St. Thomas	2,921	...	1,934	...	1,934	947	987	1,361	70
11 Stratford	2,659	...	1,494	...	1,494	789	705	1,044	70
12 Toronto	53,487	...	25,744	2	29,746	14,843	14,903	20,914	70
13 Windsor	3,974	...	1,721	...	1,721	865	856	1,262	73
14 Woodstock	2,095	...	1,592	...	1,592	795	797	1,141	72
Totals	127,183	...	66,111	2	66,113	33,174	32,939	46,980	71

*Estimated.

4 E.

THE PUBLIC SCHOOLS.—Continued.

I.—Table A.—School Population, Attendance, etc.—Continued.

Towns.	School population between 5 and 21 years of age.	Pupils under 5 years of age.	Pupils between 5 and 21 years of age.	Pupils over 21 years of age.	Total number of pupils attending School.	Boys.	Girls.	Average daily attendance of pupils.	Percentage of average to total attendance.
1 Alexandria	531		54		585	45	39	45	53
2 Alliston	460		400		860	303	200	221	55
3 Almonte	871		394		1,265	194	200	274	69
4 Amherstburg	606		291		897	153	138	186	62
5 Arnprior	907		577		1,484	274	303	406	79
6 Aurora	476		374		850	176	199	248	66
7 Aymer	555		419		974	198	221	282	67
8 Barrie	2,147		1,091		3,238	649	542	605	55
9 Berlin	2,980		1,504		4,484	774	780	1,133	75
10 Blenheim	564		394		958	214	180	268	63
11 Brantford	237		209		446	123	87	130	62
12 Bowmanville	621		470		1,091	246	224	329	70
13 Bracebridge	1,050		807		1,857	397	410	397	49
14 Brampton	900		515		1,415	269	246	333	74
15 Brockville	2,469		1,244		3,713	611	633	896	72
16 Bruce Mines	217		238		455	110	128	144	60
17 Cache Bay	275		196		471	90	106	96	48
18 Carleton Place	1,300		902		2,202	456	446	623	69
19 Clinton	584		431		1,015	331	200	303	70
20 Cobourg	916		544		1,460	279	285	374	69
21 Collingwood	1,895		1,471		3,366	725	746	971	66
22 Copper Cliff	413		352		765	168	184	212	60
23 Cornwall	1,869		652		2,521	346	307	478	73
24 Deseronto	960		655		1,615	336	320	458	70
25 Dresden	450		427		877	197	230	278	65
26 Dundas	928		563		1,491	272	291	393	62
27 Dunnville	560		478		1,038	330	348	263	55
28 Durham	460		446		906	183	262	273	61
29 East Toronto	914		703		1,617	364	339	435	62
30 Essex	366	1	357		723	174	185	207	57
31 Forest	364		304		668	129	175	208	63
32 Fort Frances	250		193		443	96	97	94	49
33 Fort William	930		716		1,646	368	348	401	57
34 Galt	1,687		1,325		3,012	643	633	857	65
35 Gananoque	1,217		758		1,975	402	356	491	65
36 Goderich	1,020		598		1,618	383	315	401	67
37 Gore Bay	263	2	278		541	136	143	152	55
38 Gravenhurst	630	3	603		1,233	312	294	376	62
39 Harriston	586	2	332		918	180	154	196	59
40 Hawkebury	1,229		139		1,368	83	66	87	62
41 Hespler	671		508		1,179	256	247	330	66
42 Huntsville	677		601		1,278	317	284	395	66
43 Ingersoll	1,408		785		2,193	390	396	491	63
44 Kincardine	572		458		1,030	217	241	242	63
45 Kingville	487		403		890	203	200	259	64
46 Leamington	693		496		1,189	264	242	298	59
47 Lindsay	1,841		1,117		2,958	555	662	800	71
48 Listowel	620		539		1,159	277	262	361	67
49 Little Current	340		331		671	161	170	149	45
50 Mattawa	461		77		538	40	37	41	53
51 Meaford	509		409		918	193	216	277	68
52 Midland	1,200		971		2,171	471	500	643	56
53 Milton	470		383		853	193	190	271	71
54 Mitchell	702		369		1,071	179	190	261	71
55 Mount Forest	523		425		948	236	189	280	66
56 Napanee	620		549		1,169	252	297	335	61
57 New Liskeard	364		280		644	146	134	123	44
58 Newmarket	602		434		1,036	222	212	287	66
59 Niagara	187		240		427	125	115	127	52
60 Niagara Falls	1,172		745		1,917	398	347	478	65
61 North Bay	902		564		1,466	277	287	324	57
62 North Toronto	539		525		1,064	261	264	328	62
63 Oakville	460	3	343		803	177	169	218	63
64 Orangeville	980		542		1,522	346	297	365	67
65 Orillia	1,638		967		2,605	479	483	663	68
66 Oshawa	1,201		777		1,978	371	406	526	67
67 Owen Sound	2,429		1,740		4,169	825	915	1,202	69
68 Palmerston	501		385		886	206	179	239	62
69 Parry	916		495		1,411	275	220	349	70
70 Parkhill	306		221		527	109	112	141	64
71 Parry Sound	1,193	1	916		2,109	438	480	601	55
72 Pembroke	1,440		652		2,092	327	326	419	64
73 Penetanguishene	801		631		1,432	333	293	391	61

THE PUBLIC SCHOOLS.— *Continued.*I.—Table A.—School Population, Attendance, etc.— *Concluded.*

Towns.	School population between 5 and 21 years of age.	Pupils under 5 years of age.	Pupils between 5 and 21 years of age.	Pupils over 21 years of age.	Total number of pupils attending school.	Boys.	Girls.	Average daily attendance of pupils.	Percentage of average to total attendance.
74 Perth	959		529		529	267	262		73
75 Peterborough	2,831		1,557		1,557	764	793	1,033	66
76 Petrolia	950		875		875	450	425	566	65
77 Picton	803		586		586	316	270	357	61
78 Port Arthur	1,000		698		698	338	360	415	59
79 Port Hope	918		838		838	416	422	460	55
80 Prescott	675		428		428	194	234	285	66
81 Preston	603		390		390	191	199	287	73
82 Rat Portage	1,694		826		826	408	418	567	68
83 Renfrew	1,082		423		423	218	205	303	71
84 Ridgeway	557		460		460	231	229	278	60
85 St. Marys	915		571		571	299	272	404	71
86 Sandwich	501		147		147	74	73	76	52
87 Sarnia	2,567		1,469		1,469	693	776	1,042	71
88 Sault Ste. Marie	1,891		1,325		1,325	648	677	806	61
89 Seaforth	615		326		326	167	159	239	73
90 Simcoe	620		459		459	229	230	284	62
91 Stayner	*1,410		1,089		1,089	500	589	788	71
92 Smith's Falls	360		266		266	131	135	202	76
93 Strathroy	750		498		498	239	259	358	72
94 Sturgeon Falls	684		225		225	101	124	123	57
95 Sudbury	*611		230		230	122	108	126	59
96 Thessalon	421		325		325	168	157	168	52
97 Thornbury	227		160		160	89	71	108	67
98 Thorold	554		318		318	155	163	179	56
99 Tillsonburg	483		474		474	238	236	331	70
100 Toronto Junction	2,148		1,384		1,384	692	692	839	60
101 Trenton	1,164		598		598	298	300	415	69
102 Uxbridge	485		345		345	173	172	208	60
103 Vankeekhill	*643		210		210	110	100	128	61
104 Walkerton	690		450		450	213	237	300	67
105 Walkerville	556		331		331	162	169	214	65
106 Wallaceburg	1,018		583		583	284	299	401	69
107 Waterloo	1,090		590		590	316	274	462	78
108 Welland	430		252		252	127	125	185	73
109 Whitby	691		379		379	195	184	248	65
110 Winton	*843		649		649	340	309	410	63
111 Wingham	700		583		583	264	319	378	65
Totals	98,201	12	63,151	9	63,172	31,446	31,726	40,833	65
Totals.									
11 Counties, etc... ..	351,999	905	272,876	95	273,876	142,174	131,702	142,917	52
2 Cities	127,183		66,111	2	66,113	33,174	32,939	46,980	71
3 Towns	98,201	12	63,151	9	63,172	31,446	31,726	40,833	65
4 Grand totals, 1903	577,383	917	402,138	106	403,161	206,794	196,367	230,730	57.20
5 Grand totals, 1902	584,512	1,001	407,013	110	408,124	209,566	198,558	232,663	57.01
6 Increases .....									.19
7 Decreases	7,129	84	4,875	4	4,963	2,772	2,191	1,933	.....
8 Percentages .....	.....	.23	99.75	.02	.....	51.29	48.71	57.20	.....

* Estimated.

† Including Protestant Separate School.

‡ In incorporated villages, included in Counties etc., there were 28,463 pupils enrolled, with an average daily attendance of 17,747.

§ Kindergarten and Night School pupils are not included.

THE PUBLIC

II.—Table B.—Number of pupils in the

Counties (including incorporated villages, but not cities or towns), etc.	Reading.					5th or High School Reader.	Writing.	Arithmetic.	Drawing.
	1st Reader, Part I.	1st Reader, Part II.	2nd Reader.	3rd Reader.	4th Reader.				
1 Brant	621	426	549	704	649	115	3,038	3,064	3,036
2 Bruce	2,379	1,603	1,959	2,027	1,926	574	10,068	10,354	9,902
3 Carleton	1,621	1,033	1,124	1,203	1,366	338	6,172	6,284	6,058
4 Dufferin	955	722	746	983	884	181	4,293	4,431	4,231
5 Dundas	836	611	1,047	724	749	284	4,135	4,203	4,048
6 Durham	800	615	990	994	853	190	4,442	4,442	4,385
7 Elgin	1,213	693	1,015	1,214	1,147	526	5,718	5,758	5,738
8 Essex	1,744	1,322	1,343	1,129	1,784	122	6,316	6,336	6,276
9 Frontenac	1,375	840	948	1,186	1,124	115	5,588	5,588	5,588
10 Glengarry	1,152	594	746	596	632	61	3,781	3,781	3,781
11 Grey	3,071	1,945	2,749	2,569	2,120	398	12,495	12,752	12,466
12 Haldimand	701	522	679	720	854	167	3,637	3,635	3,626
13 Haliburton, N. E. Mus- koka, S. Nipissing and E. Parry Sound	1,570	789	884	912	630	178	4,652	4,628	4,171
14 Halton	734	433	535	615	787	176	3,280	3,280	3,280
15 Hastings	2,673	1,522	1,686	1,552	1,161	295	8,789	8,789	8,786
16 Huron	1,459	1,214	1,924	2,131	2,429	374	9,895	9,992	9,597
17 Kent	1,852	1,108	1,462	1,352	1,521	634	7,841	7,828	7,929
18 Lambton	2,195	1,613	1,480	1,721	1,694	436	8,995	9,076	8,405
19 Lanark	1,094	666	810	841	720	156	4,287	4,287	4,287
20 Leeds & Grenville	1,863	1,320	1,653	1,688	1,933	316	8,522	8,560	8,263
21 Lennox & Addington	892	590	795	836	886	167	4,166	4,166	4,149
22 Lincoln	772	528	621	776	863	90	3,537	3,605	3,362
23 Middlesex	1,610	1,244	1,542	1,913	1,897	575	8,781	8,781	8,781
24 Norfolk	1,203	726	1,134	1,010	1,157	202	5,313	6,351	6,273
25 Northumberland	1,105	786	1,223	1,168	1,166	225	5,456	6,557	6,171
26 Ontario	1,356	980	1,286	1,359	1,526	240	6,627	6,713	6,566
27 Oxford	1,351	994	1,140	1,274	1,517	455	6,547	6,566	6,483
28 Peel	710	562	643	835	834	180	3,692	3,694	3,579
29 Perth	1,062	864	1,112	1,656	1,286	237	6,015	6,122	5,795
30 Peterborough	1,248	868	977	946	969	118	6,126	6,041	4,601
31 Prescott & Russell	1,778	846	813	770	769	197	4,842	5,044	4,716
32 Prince Edward	464	312	461	509	703	211	2,627	2,642	2,621
33 Renfrew	2,086	1,330	1,379	1,291	1,111	243	7,040	7,253	6,159
34 Simcoe & W. Muskoka	3,336	2,168	2,836	2,821	2,972	853	14,896	14,829	14,077
35 Stormont	1,006	498	881	751	690	150	3,976	3,976	3,815
36 Victoria & S. E. Musk.	1,423	1,038	1,388	1,440	1,278	242	6,504	6,643	6,285
37 Waterloo	1,127	811	1,393	1,204	777	171	5,488	5,488	5,488
38 Welland	1,149	798	916	1,072	976	260	5,084	5,062	5,001
39 Wellington	1,585	1,009	1,533	1,690	1,690	413	7,849	7,843	7,742
40 Wentworth	847	618	815	1,110	1,039	280	4,709	4,709	4,709
41 York	2,757	1,499	2,207	2,330	2,307	200	11,000	11,253	10,775
42 Rainy River and Thun- der Bay	518	352	261	378	231	35	1,725	1,741	1,692
43 Algoma and Manitou- lin	1,779	989	1,052	1,173	907	172	5,834	5,847	5,678
44 N. Nipissing, etc., and W. Parry Sound	1,818	1,004	1,052	909	558	80	4,661	4,732	4,197
45 Moose Fort .....	.....	6	3	3	2	5	19	19	.....
Totals	62,782	41,001	51,792	54,090	52,074	12,137	267,457	269,935	260,601
Cities.									
1 Belleville	332	209	235	213	310	.....	1,299	1,299	1,299
2 Brantford	566	356	396	704	488	52	2,562	2,562	2,562
3 Chatham	306	204	286	341	406	.....	1,543	1,543	1,543
4 Guelph	317	191	290	453	339	112	1,702	1,702	1,702
5 Hamilton	1,256	1,074	1,310	2,227	1,750	497	8,114	8,114	8,114
6 Kingston	497	282	338	634	623	.....	2,374	2,374	2,336
7 London	982	770	1,408	1,290	1,225	.....	5,675	5,675	5,675
8 Ottawa	956	587	709	1,333	1,182	131	4,898	4,898	4,898
9 St. Catharines	358	228	231	379	263	.....	1,459	1,459	1,101
10 St. Thomas	499	238	384	433	390	.....	1,934	1,934	1,934
11 Stratford	245	237	218	416	378	.....	1,494	1,494	1,494
12 Toronto	5,643	3,454	6,772	6,497	6,063	1,817	29,746	29,746	29,746
13 Windsor	596	307	363	296	159	.....	1,721	1,721	1,721
14 Woodstock	386	222	311	203	470	.....	1,592	1,592	1,592
Totals	12,939	8,349	13,251	15,419	14,046	2,109	66,113	66,113	65,717

SCHOOLS.—Continued.

various branches of instruction.

Geography.		Music.	Grammar and Composition.	English History.	Canadian History.	Physiology and Temperance.	Drill and Calisthenics.	Bookkeeping.	Algebra.	Geometry.	Botany.	Elementary Physics.	Agriculture.	
1	2	1,228	1,808	2,015	783	1,225	922	1,697	102	104	99	17	25	506
2	6	772	4,709	6,724	2,626	4,227	4,582	4,851	437	580	542	184	268	1,302
3	4	2,15	2,908	4,393	1,854	2,362	1,987	2,458	327	316	313	249	132	1,043
4	3	1,42	2,405	2,650	1,221	1,888	1,750	2,660	228	191	188	87	145	733
5	3	434	2,784	3,105	1,159	1,478	1,713	2,519	217	269	255	29	132	754
6	3	010	1,658	2,456	1,833	1,080	1,031	1,260	197	183	163	47	44	192
7	4	424	3,161	3,812	1,882	2,716	2,957	3,377	512	513	486	183	159	1,156
8	3	347	2,802	3,517	1,941	2,106	2,255	3,551	129	117	103	64	59	713
9	3	228	1,321	2,875	1,362	2,031	1,750	2,565	87	78	69	25	9	413
10	2	216	1,017	1,955	701	957	7,823	1,475	57	56	55	32	11	195
11	2	778	6,513	7,648	2,777	4,998	7,618	7,558	426	363	343	163	111	1,564
12	2	748	1,795	2,569	1,063	1,413	1,430	2,102	149	156	130	16	30	986
13	2	652	1,279	2,356	1,117	1,565	1,437	2,203	149	139	144	16	62	247
14	2	515	1,409	2,405	1,022	1,393	1,232	1,716	164	173	173	66	55	565
15	5	288	4,119	5,158	1,498	2,961	4,811	5,550	408	278	266	100	73	911
16	7	713	5,372	7,182	2,273	4,833	3,335	4,254	785	854	824	214	183	880
17	5	62	5,047	5,378	2,418	3,128	3,456	4,829	631	635	635	119	171	1,909
18	5	691	6,152	6,470	2,200	3,759	3,727	5,468	361	418	402	138	94	1,541
19	2	675	1,311	2,410	948	1,476	1,102	2,300	179	187	184	208	94	869
20	6	119	4,394	5,902	2,980	3,613	3,267	4,464	295	287	274	147	125	1,343
21	2	933	1,578	2,531	1,250	1,750	1,657	2,414	155	136	121	31	45	840
22	2	599	1,605	2,392	1,027	1,610	1,302	1,565	111	57	37	96	122	582
23	6	543	6,333	5,801	2,572	3,953	4,358	6,594	536	542	533	138	92	2,279
24	3	899	2,959	3,527	1,536	1,993	1,834	3,373	232	188	176	80	14	1,158
25	3	763	2,142	3,516	1,127	1,671	1,468	2,016	205	215	176	28	68	801
26	4	602	3,207	4,197	2,014	2,604	2,192	2,485	240	230	213	31	3	884
27	4	338	2,647	4,526	1,974	2,826	2,363	2,725	364	433	396	82	164	966
28	2	602	1,586	2,282	1,550	1,704	1,223	2,064	172	183	183	.....	37	266
29	4	470	3,614	4,160	1,664	3,012	1,561	5,118	231	210	202	64	27	1,477
30	3	122	2,087	2,808	1,282	1,781	1,703	2,235	119	105	96	46	6	277
31	2	708	1,827	2,627	1,024	1,563	1,457	3,101	199	195	193	199	54	671
32	2	149	1,022	2,015	1,004	1,165	1,439	1,352	213	200	158	221	86	1,020
33	3	943	1,658	3,762	1,464	2,099	1,777	1,978	248	229	224	24	99	356
34	9	401	7,291	8,827	4,155	6,065	5,609	9,411	799	759	759	312	332	2,240
35	2	808	1,594	2,630	940	1,134	1,275	1,961	146	120	119	8	52	439
36	4	460	2,174	3,843	1,680	2,323	1,909	2,186	224	222	204	68	29	518
37	3	550	3,371	2,157	745	1,874	952	3,034	143	132	127	50	7	318
38	3	390	2,528	3,266	1,584	2,131	1,920	2,155	252	248	215	101	5	406
39	5	382	4,029	4,922	2,221	3,579	3,086	4,358	402	389	377	257	153	1,097
40	3	435	2,466	3,288	1,470	2,079	1,338	2,863	243	234	230	218	112	1,033
41	8	255	6,082	7,680	2,943	4,251	3,870	4,983	184	192	160	159	57	761
42	997	415	871	286	499	576	411	36	31	29	.....	.....	.....	170
43	3,280	1,435	2,932	1,285	2,049	1,925	1,614	197	148	146	28	16	265	.....
44	2,558	925	2,345	787	1,157	943	1,491	90	73	65	27	44	111	.....
45	3	19	6	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
182,877 127,658 167,195 70,242 104,081 101,922 139,344 11,704 11,410 10,797 4,352 3,596 35,760														
1	2	758	725	885	310	523	551	926	.....	.....	.....	.....	.....	.....
2	2	562	2,562	1,647	540	1,261	2,562	2,562	52	.....	.....	.....	.....	.....
3	1	346	1,543	1,346	526	747	642	1,543	.....	.....	.....	.....	.....	.....
4	1	144	1,702	1,702	339	792	792	1,702	112	.....	.....	.....	.....	.....
5	5	961	8,053	6,858	2,227	2,912	4,541	8,114	497	497	469	1,646	385	.....
6	1	876	2,282	1,894	623	958	991	2,374	.....	.....	623	.....	.....	.....
7	5	675	5,675	2,515	835	1,743	5,675	5,675	.....	.....	.....	.....	.....	.....
8	2	646	1,543	2,646	1,313	2,646	2,646	4,898	131	82	82	.....	.....	.....
9	873	.....	873	263	465	465	465	.....	.....	.....	.....	.....	.....	.....
10	1,207	.....	1,207	390	823	1,207	823	.....	.....	.....	.....	.....	.....	.....
11	1,138	1,034	1,260	378	588	938	1,494	.....	.....	.....	.....	.....	.....	.....
12	28,844	27,958	5,782	7,510	17,520	27,839	3,081	202	785	2,615	.....	.....	309	.....
13	962	1,721	962	154	460	1,721	1,721	.....	.....	.....	.....	.....	.....	.....
14	984	1,592	673	470	673	704	.....	.....	.....	.....	.....	.....	.....	.....
55,876 57,286 52,426 14,150 22,101 40,955 59,671 3,873 781 1,959 4,261 385 309														

THE PUBLIC

II.—Table B.—Number of pupils in the

Towns.	Reading.						Writing.	Arithmetic.	Drawing.
	1st Reader, Part I.	1st Reader Part II.	2nd Reader.	3rd Reader.	4th Reader.	5th or High School Reader.			
1 Alexandria	11	11	24	17	21	97	84	84	84
2 Alliston	30	32	74	41	78	97	402	402	402
3 Almonte	85	51	117	67	74	50	394	394	394
4 Amherstburg	54	57	58	46	24	50	291	291	291
5 Arnprior	140	120	120	99	98	50	577	577	577
6 Aurora	96	54	84	75	65	50	374	374	374
7 Aylmer	57	68	88	98	110	50	419	419	419
8 Barrie	222	129	281	241	216	2	1,091	1,091	1,091
9 Berlin	244	292	400	347	221	2	1,504	1,504	1,504
10 Blenheim	99	42	108	78	27	40	373	394	394
11 Bothwell	47	19	23	30	36	50	210	210	210
12 Bowmanville	106	57	96	102	109	50	470	470	470
13 Bracebridge	270	152	133	199	53	50	807	807	807
14 Brampton	112	83	79	149	92	50	515	515	515
15 Brockville	258	162	279	261	284	50	1,244	1,244	1,244
16 Bruce Mines	41	35	60	40	21	41	216	238	216
17 Cache Bay	93	17	46	17	18	5	196	196	196
18 Carleton Place	250	172	148	140	192	50	902	902	902
19 Clinton	84	50	103	120	74	50	431	431	431
20 Cobourg	91	79	119	138	117	50	544	544	544
21 Colingwood	455	240	185	304	287	50	1,471	1,471	1,471
22 Copper Cliff	146	46	81	38	28	14	352	352	352
23 Cornwall	142	119	153	115	128	50	652	652	652
24 Deseronto	207	110	135	137	68	50	655	655	655
25 Dresden	130	83	36	68	53	57	427	427	427
26 Dundas	145	113	62	107	136	50	563	563	563
27 Dunnville	122	86	92	73	105	50	478	478	478
28 Durham	102	64	76	53	71	84	450	450	450
29 East Toronto	230	122	87	140	124	50	703	703	703
30 Essex	123	74	63	58	41	50	359	359	359
31 Forest	73	52	56	44	79	50	304	304	304
32 Fort Frances	61	31	34	30	23	14	193	193	193
33 Fort William	253	98	124	105	136	50	716	716	716
34 Galt	307	93	308	318	299	50	1,325	1,325	1,325
35 Gananoque	240	69	150	155	144	50	758	758	758
36 Goderich	90	77	130	167	134	50	598	598	598
37 Gore Bay	49	29	57	49	48	46	278	278	278
38 Gravenhurst	168	97	166	93	82	50	606	606	606
39 Harriston	59	45	60	80	90	50	334	334	334
40 Hawkesbury	30	24	26	30	29	50	139	139	139
41 Hespele	146	54	67	128	82	26	503	503	503
42 Huntsville	179	108	121	102	45	46	591	601	601
43 Ingersoll	160	72	191	194	168	50	785	785	785
44 Kincardine	73	63	81	131	110	50	458	458	458
45 Kingsville	105	61	82	84	43	28	403	403	403
46 Leamington	106	88	129	99	74	50	496	496	496
47 Lindsay	250	124	262	278	203	50	1,117	949	1,087
48 Listowel	111	65	89	143	131	50	539	539	539
49 Little Current	114	29	80	43	50	15	331	331	331
50 Mattawa	22	12	10	6	17	10	77	77	77
51 Meaford	100	94	103	62	50	50	409	409	409
52 Midland	327	158	183	158	96	49	971	971	971
53 Milton	87	54	56	40	72	74	383	383	383
54 Mitchell	58	54	49	112	96	50	369	369	369
55 Mount Forest	75	49	102	88	111	50	425	425	425
56 Napanee	121	83	94	100	146	50	549	549	549
57 New Liskeard	106	25	51	53	42	3	280	280	280
58 Newmarket	104	32	139	74	85	50	434	434	434
59 Niagara	50	19	47	58	66	50	240	240	240
60 Niagara Falls	168	102	143	171	171	50	745	745	745
61 North Bay	228	89	81	75	91	50	564	564	564
62 North Toronto	166	27	30	93	82	17	525	525	525
63 Oakville	66	78	59	87	56	50	346	346	346
64 Orangeville	118	90	121	103	110	50	542	542	542
65 Orillia	233	141	173	194	167	59	967	967	967
66 Oshawa	187	110	141	213	126	50	777	777	777
67 Owen Sound	402	213	377	365	383	50	1,740	1,740	1,740
68 Palmerston	88	49	52	93	63	30	385	385	385
69 Paris	107	88	85	123	92	50	495	495	495
70 Parkhill	44	41	41	46	49	50	221	221	221
71 Parry Sound	365	80	158	124	124	67	892	917	892

SCHOOLS.—Continued.

various branches of instruction.—Continued.

	Geography.	Music.	Grammar and Composition.	English History.	Canadian History.	Physiology and Temperance.	Drill and Calisthenics.	Bookkeeping.	Algebra.	Geometry.	Botany.	Elementary Physics.	Agriculture.
1	84	84	62	33	33	62	84						21
2	402	402	402	264	264	213	310	49	97	97	49	97	
3	239		218	74	104	74	42						
4	181	291	237	61	107	187		35	50	50	35	20	
5	317	380	577	98	197	577	380						
6	374	309	374	65	124	124	309						
7	419	203	419	87	208	110	186						
8	957	1,091	920	419	459	497	1,036	538	2	2			
9	968	1,504	768	221	568	568	1,504						
10	295		295	104	128	147	96						
11	210		210	78	78	94	160	40	40	40	40	40	
12	307	470	307	109	201	256	470	50	50	50	50	50	
13	627	448	295	53	147	53	807						
14	370	515	515	92	241	142	471						
15	1,244	1,244	1,244	284	415	1,244	1,244						
16	216		238	62	102	61		31	41	41	31	12	
17	86	93	86	23	65	40		5	5	5			23
18	430	902	480	192	332	332	902						
19	297	431	297	74	194	74	431						
20	374	289	255	117	255	255	544						
21	1,471	1,397	971	591	591	1,471	1,471						
22	209	352	173	80	80	80		14	14	14		14	42
23	532	652	652	238	238	391	652						
24	448	655	338	66	290	203	655						
25	270	340	270	176	176	121		55	57	57	57	57	
26	305	563	305	136	243	563	563						
27	270	373	204	64	105	149	329						
28	270	229	284	111	164	200	450	40	84	84	40	84	
29	473	703	473	136	298	124	703						
30	192		192	41	99	359	292						
31	179	304	304	79	123	123	225						
32	193	193	132	37	67	53	145	14	14	14			
33	475	649	699	134	239	239	603				67		
34	1,018	1,325	970	176	617	1,325	761						
35	518	394	375	144	212	299	329						
36	431	598	431	134	197	134	598						
37	154		179	69	89	68		21	46	46		20	
38	346	860	316	112	174	150	125						
39	275		275	90	170	275	275						
40	139	139	139	29	59	59	139						
41	357		357	69	197	133		12	12	12			12
42	352		422	91	193	268		46	46	46	46		
43	785	785	569	163	314	785	785						
44	237	458	458	110	241	401	458						
45	271	403	328	71	155	271	403	28	28	28	28		
46	317		360	74	173	390							
47	722	900	867	203	320	317	657						
48	363	539	539	131	274	131	539						
49	188	331	217	108	108	93	331	15	15	15	15		
50	43	47	43	27	33	27		10	10	10			
51	409	409	409	50	144	409	409						
52	492	922	644	303	303	922	971	49	49	49	18	18	
53	291	382	229	125	165	331	383	88	74	74		40	35
54	257	218	257	98	208	96	369						
55	350	425	301	111	199	301	425						
56	549	549	340	246	246	549	549						
57	174	280	280	98	98	98		3	3	3			
58	298		298	159	159	85	484						
59	240		240	124	124	190							
60	585		585	332	485	485							
61	564	564	247	166	166	247							
62	525	525	525	99	192	89	525	17	17	17			
63	224	348	202	56	143	143	346						
64	377	542	334	213	213	334	542						
65	642	869	720	277	393	334	108	59					
66	398	179	480	72	126	126	177						
67	1,135	1,740	1,135	383	748	748	1,740						
68	287	292	287	93	186	159	199	30	30	30	30	30	
69	495		215	92	165	495							
70	136	221	95	49	95	95							
71	448		473	166	290	284	850	42	67	67	42	67	

THE PUBLIC

II.—Table B—Number of pupils in the

Towns.	Reading.						Writing.	Arithmetic.	Drawing.
	1st Reader Part I.	1st Reader Part II.	2nd Reader.	3rd Reader.	4th Reader.	5th or High School Reader.			
72 Pembroke	170	93	118	88	188	28	652	662	662
73 Penetanguishene	231	111	116	74	76	28	631	631	631
74 Perth	112	61	180	109	117	28	529	529	529
75 Peterborough	383	256	307	304	307	28	1,557	1,557	1,557
76 Petrolia	243	160	183	202	137	28	875	875	875
77 Picton	202	66	103	103	112	28	586	586	586
78 Port Arthur	170	154	106	119	149	28	693	693	693
79 Port Hope	185	167	156	160	170	28	838	838	838
80 Prescott	109	92	58	52	117	28	423	423	423
81 Preston	91	53	105	87	54	28	390	390	390
82 Rat Portage	312	101	132	165	116	28	826	826	826
83 Renfrew	123	42	67	75	115	28	423	423	423
84 Ridgetown	112	48	115	79	106	28	460	460	460
85 St. Mary's	99	87	96	163	126	28	571	571	571
86 Sandwich	55	11	20	37	23	28	147	147	147
87 Sarnia	454	223	256	266	271	28	1,469	1,469	1,469
88 Sault Ste. Marie	470	219	211	267	158	28	1,325	1,325	1,325
89 Seaford	86	45	88	48	109	28	326	326	326
90 Simcoe	115	51	101	59	133	28	459	459	459
91 Smith's Falls	326	139	218	209	197	28	1,089	1,089	1,089
92 Stayner	78	39	41	33	34	41	236	266	236
93 Strathroy	105	67	114	88	124	28	498	498	498
94 Sturgeon Falls	60	43	26	48	33	15	225	225	225
95 Sudbury	62	26	41	45	35	21	230	230	230
96 The-elon	126	27	63	39	56	14	325	325	325
97 Thornbury	30	21	26	28	48	7	160	160	160
98 Thorold	72	60	43	79	64	28	318	318	318
99 Tilsonburg	81	51	104	112	126	28	474	474	474
100 Toronto Junction	351	280	207	281	265	28	1,384	1,384	1,384
101 Trenton	133	99	160	84	122	28	598	598	598
102 Unbridge	89	42	77	77	60	28	345	345	345
103 Vankleekhill	61	11	29	48	61	28	210	210	210
104 Walkerton	91	73	74	80	132	28	450	450	450
105 Walkville	81	46	68	66	43	27	331	331	331
106 Wallaceburg	166	119	85	76	38	99	544	583	544
107 Waterloo	110	104	133	127	116	28	590	590	590
108 Welland	55	54	45	34	64	28	252	252	252
109 Whitby	75	60	65	85	104	28	379	379	379
110 Wilmot	196	142	134	101	76	28	649	649	649
111 Wingham	94	74	126	123	68	108	583	583	485
Totals	16,151	9,427	12,215	12,428	11,671	1,280	63,024	63,003	62,294
Totals.									
11 Counties, etc.	62,782	41,001	51,792	54,090	52,074	12,137	267,467	269,935	260,801
2 Cities	12,939	8,349	13,251	15,419	14,046	2,109	66,113	66,113	66,117
3 Towns	16,151	9,427	12,215	12,428	11,671	1,280	63,024	63,003	62,294
4 Grand totals, 1903	91,872	58,777	77,258	81,937	77,791	15,526	396,594	399,051	388,612
5 Grand totals, 1902	92,941	61,062	77,023	82,724	77,646	16,729	399,362	403,609	392,073
6 Increases			235		146				
7 Decreases	1,069	2,285		787		1,203	2,758	4,658	3,466
8 Percentages	22.79	14.58	19.16	20.32	19.3	3.85	98.37	98.95	96.39

*Including Protestant Separate School

†In incorporated villages, included in Counties, etc., the numbers in the Readers were: 1st, Part I, 6,507; Part II, 4,823; 2nd, 5,170; 3rd, 5,019; 4th, 5,283; 5th, 2,161.

SCHOOLS.—Continued.

various branches of instruction.—Concluded.

	Geography.	Music.	Grammar and Composition.	English History.	Canadian History.	Physiology and Temperance.	Drill and Calisthenics.	Bookkeeping.	Algebra.	Geometry.	Botany.	Elementary Physics.	Agriculture.
72	482	652	389	188	389	389	652						
73	393	465	393	99	173	99	182	28	21	21			63
74	356	529	356	117	168	117	529						
75	918	439	918	223	611	611	857						
76	569	446	571	137	339	403	875						
77	586	586	371	215	215	586	586					318	
78	409		409	149	268	268	289						
79	838	838	476	170	253	330	838						
80	278	428	227	169	169	169	428						
81	277	390	188	54	141	141							
82	826	826	513	116	281	281							
83	257	423	423	96	190	190	423						
84	460	392	490	185	185	300	354						
85	385	63	476	126	289	126	132						
86	92		81	48	48	48		1	1	1	1		
87	792	1,149	1,213	197	536	984	1,357						
88	870	1,325	755	92	425	720	1,325						
89	195	326	195	109	147	109	195						
90	293	459	192	133	192	459	459						
91	1,089	1,089	1,089	197	291	1,089	1,089						
92	183	141	149	108	45	34		11	41	41	11	11	
93	328	498	326	64	212	498	498						
94	123	59	123	48	96	48		15	15	15	15		
95	142	62	216	56	101	105	82	21	21	21	21		
96	172	325	109	70	109	70		14	14	14			14
97	160	160	160	55	83	130	160	7	7	7	7		
98	238		213	64	161	119							
99	342	474	474	238	238	295	474						
100	726	1,384	726	265	546	265	384						
101	366	209	429	122	206	206	288						
102	223	345	345	60	94	223	345						
103	149	210	210	61	109	149	210						
104	335	450	450	132	212	450	450						
105	229	331	229	96	136	243	331	27	27	10	10		
106	319	268	448	179	174	68		60	99	99	25	39	
107	385		370	116	168	116	97						
108	252		133	98	133	133	252						
109	379	379	379	104	189	379	379						
110	248	649	248	76	177	230	261						
111	415	415	415	170	170	58		49	108	108	49	59	
	46,353	46,993	44,283	14,532	23,983	32,070	43,322	1,519	1,205	1,188	687	983	199
1	182,877	127,658	167,195	70,242	104,081	101,922	139,344	11,704	11,410	10,797	4,352	3,596	35,760
2	55,876	57,286	52,426	14,150	22,101	40,955	59,671	3,873	781	1,959	4,261	385	309
3	46,353	46,993	44,283	14,532	23,983	32,070	43,322	1,519	1,205	1,188	687	983	199
4	284,106	231,937	263,904	98,924	150,155	174,947	242,337	17,096	13,396	13,944	9,300	4,964	36,268
5	288,967	236,797	268,763	98,738	148,637	179,772	242,115	17,091	14,625	14,644	7,298	4,152	43,295
6				186	1,528		222	5			2,002	812	
7	4,861	4,860	4,859			4,825			1,229	700			7,027
8	70.47	57.52	65.46	24.54	37.24	43.39	60.11	4.24	3.32	3.45	2.3	1.23	8.99

THE PUBLIC

III.—Table C.—Teachers, Salaries

Counties, (including incorporated villages, but not cities or towns) etc.	Number of teachers.	Male.	Female.	Salaries.		
				Highest salary paid.	Average salary, male teacher.	Average salary, female teacher.
1 Brant	70	19	51	575	386	234
2 Bruce	224	77	147	900	395	239
3 Carleton	141	28	113	600	401	232
4 Dufferin	105	14	91	700	378	232
5 Dundas	110	43	67	800	366	270
6 Durham	116	20	96	600	415	292
7 Elgin	181	37	94	550	409	297
8 Essex	124	38	86	550	384	297
9 Frontenac	154	18	136	500	300	242
10 Glengarry	83	12	71	550	349	262
11 Grey	248	78	170	725	369	243
12 Haldimand	94	17	77	650	428	292
13 Haliburton, N. E. Muskoka, S. Nipissing and E. Parry Sound	182	24	109	600	355	231
14 Halton	77	19	58	650	408	292
15 Hastings	200	53	147	800	367	232
16 Huron	222	85	137	800	403	294
17 Kent	149	40	109	720	420	294
18 Lambton	205	45	160	600	399	296
19 Lanark	132	12	120	600	333	246
20 Leeds and Grenville	262	51	211	700	334	267
21 Lennox and Addington	126	28	108	550	311	256
22 Lincoln	82	28	56	700	436	281
23 Middlesex	206	61	146	525	393	303
24 Norfolk	121	40	81	600	358	279
25 Northumberland	128	41	87	700	388	281
26 Ontario	141	36	106	750	395	292
27 Oxford	139	66	83	650	438	305
28 Per.	89	21	68	625	386	303
29 Perth	122	45	77	510	400	311
30 Peterborough	116	23	83	650	357	279
31 Prescott and Russell	111	24	87	850	357	245
32 Prince Edward	82	26	56	500	337	234
33 Renfrew	167	25	132	600	348	267
34 Simcoe and W. Muskoka	806	104	202	750	392	232
35 Stormont	89	31	68	475	355	267
36 Victoria and S. E. Muskoka	187	48	119	600	371	258
37 Waterloo	116	48	68	625	429	307
38 Welland	105	20	85	720	432	238
39 Wellington	168	60	108	650	397	312
40 Wentworth	96	33	63	650	412	303
41 York	207	75	132	750	434	307
42 Rainy River and Thunder Bay	44	19	25	850	404	337
43 Algoma and Manitoulin	134	42	92	600	358	294
44 N. Nipissing, etc., & W. Parry Sound	156	20	136	500	336	252
*1 Totals, Counties, etc.	6,188	1,686	4,502	900	387	233
2 Cities	1,273	189	1,084	1,600	951	491
3 Towns	1,099	187	912	1,200	678	327
*4 Grand totals, 1903	8,560	2,062	6,498	1,600	465	324
*5 Grand totals, 1902	8,497	2,200	6,297	1,600	436	312
6 Increases	63	138	201		29	11
7 Decreases						
8 Percentages		24.09	75.91			

* 1. Incorporated villages, included in Counties, etc., there were 31 teachers, 144 male and 387 female, with average salaries of \$355 and \$285 respectively. 77 held First Class, 34 Second Class, and 93 Third Class certificates. 14 were graduates.

* 2. Haliburton and Nipissing teachers not included.

SCHOOLS.—Continued.

Certificates, etc.

	Number of teachers who have attended Normal School, or Normal College.	Number of University graduates	Certificates.						Other certificates.
			Provincial First Class.	Provincial Second Class.	First Class, old County Board.	Second Class, old County Board.	Third Class.	Temporary.	
1	44		5	39			26		
2	104		15	90		1	110	7	1
3	78	1	2	76	1		55	7	
4	36	3	5	33			66	1	
5	42	2	4	37			69		
6	69		4	55		1	58		
7	63		8	57			66		
8	46	1	4	43			66	6	5
9	35	2	2	33		1	77	41	
10	27	3	4	23			43	13	
11	103		7	89		7	140	4	1
12	50	1	7	43			44		
13	4	1	4	19			77	33	
14	45	1	6	39			31	1	
15	69		4	65			127	4	
16	133		11	123			88		
17	79		5	77			65	2	
18	114	1	7	107		1	84	6	
19	89	2		39	2		81	10	
20	97	2	5	93			163	1	
21	28	3	1	27	1	1	82	3	11
22	45		5	42		1	32		2
23	130		7	115			79	5	
24	51		2	50		2	67		
25	78	1	3	74		1	48	2	
26	71		4	67			70		
27	80	1	8	73	1		57		
28	51		5	46			38		
29	77		7	70			45		
30	47		3	44		1	47	20	1
31	20		3	19			46	6	37
32	28		2	26			46	8	
33	23		2	22	1		102	29	1
34	104	2	12	96			195	3	
35	26		2	23		1	60	3	
36	54		3	52	1		78	20	13
37	72		6	67		1	42		
38	41		4	37	4		60		
39	87		8	82			77	1	
40	61		9	53			34		
41	146		2	148	2		54	1	
42	13		1	10			17	16	
43	31		7	38	3	3	23	33	28
44	24		4	27	1	1	78	44	1
1	2,644	39	219	2,438	17	22	3,011	330	101
2	1,216	26	239	986	10	3	15		15
3	935	20	139	818	10	6	103	17	6
4	4,795	85	597	4,292	37	36	3,129	347	122
5	4,601	81	595	4,136	34	29	3,319	311	73
6	194	4	2	156	3	7		36	49
7							190		
8	56.02	1	6.97	50.14			36.55	4.05	

THE PUBLIC

IV.—Table D.—School Houses,

Totals.	School Houses.					School Visits.				
	Number of Schools.	Brick.	Stone.	Frame.	Log.	By Inspector.	By Trustees.	By Clergymen.	By other persons.	Total.
1 Counties, etc.....	5,324	2,311	423	2,293	297	10,908	6,698	3,219	20,503	41,328
2 Cities	171	148	17	6	.....	3,190	2,526	750	13,964	20,430
3 Towns	239	166	28	45	.....	2,200	1,959	393	2,352	6,904
4 Grand totals, 1903 ...	5,734	2,625	468	2,344	297	16,298	11,183	4,362	36,819	68,662
5 Grand totals, 1902 ...	5,671	2,533	479	2,339	320	16,378	12,354	4,521	39,030	72,283
6 Increases	63	92	.....	5	.....	.....	.....	.....	.....	.....
7 Decreases .....	.....	.....	11	.....	23	80	1,171	159	2,211	3,621
8 Percentages .....	.....	45.78	8.16	40.88	5.18	23.74	16.29	6.35	53.62	.....

(*) Also 5,690 shrubs and bulbs, and 14,960 plants.

(†) To each school.

SCHOOLS.—Continued.

Prayers, etc.

Maps and Globes.		Examinations, Prizes.		Lectures.			Trees.		Number of schools using authorized Scripture Readings.	Number of schools opened or closed with prayer.	Number of schools using the Bible.	Number of schools imparting religious instruction.
Number of Maps.	Number of Globes.	Number of public examinations.	Number of schools distributing prizes or merit cards.	By Inspector.	By other persons.	Total.	Number of trees planted on Arbor Day.					
1	44,714	4,819	2,280	574	954	222	1,176	7,516	2,987	5,152	2,272	974
2	8,101	260	168	90	26	57	83	*3	47	167	137	.....
3	2,943	329	46	35	94	67	161	205	100	232	142	6
4	55,758	5,408	2,494	699	1,074	346	1,420	7,724	3,134	5,551	2,551	980
5	52,503	5,195	2,369	552	1,232	258	1,490	10,333	3,273	5,492	2,437	890
6	3,255	213	125	147	.....	88	.....	.....	.....	59	114	90
7	.....	.....	.....	.....	158	.....	70	2,609	139	.....	.....	.....
8	†9.72	†.94	.....	12.19	75.63	24.37	.....	.....	54.65	96.81	44.49	17.09

THE PUBLIC

V.—Table E.—

Counties (including incorporated villages, but not cities or towns) etc.	Receipts.			
	Legislative grants.	Municipal grants and assessments.	Clergy Reserve fund, balances and other sources.	Total receipts for all Public School purposes.
	\$ c.	\$ c.	\$ c.	\$ c.
1 Brant	2,364 02	28,958 11	22,663 74	53,985 87
2 Bruce	8,077 12	92,249 61	35,282 70	135,609 43
3 Carleton	6,093 83	53,636 17	16,336 11	75,066 11
4 Dufferin	3,403 00	43,107 88	15,609 98	62,120 86
5 Dundas	3,333 67	48,976 07	9,544 75	61,854 49
6 Durham	3,279 50	45,632 54	17,086 94	63,998 92
7 Elgin	5,025 63	50,926 45	30,467 08	86,419 06
8 Essex	4,376 45	50,790 07	27,967 03	83,133 55
9 Frontenac	4,232 50	39,417 26	16,138 65	59,788 41
10 Glengarry	2,613 55	27,348 53	9,435 90	39,397 98
11 Grey	8,220 22	97,709 08	32,167 03	138,096 33
12 Haldimand	3,149 00	35,623 92	16,266 54	55,039 46
13 Haliburton, N.E. Muskoka, S. Nipissing, and E. Parry Sound	11,461 48	30,562 66	9,246 24	51,270 38
14 Halton	2,721 87	27,465 91	15,833 97	46,021 75
15 Hastings	7,633 00	66,356 92	31,833 95	105,823 87
16 Huron	8,118 62	83,975 90	40,673 34	132,767 86
17 Kent	6,528 73	64,676 57	52,614 07	123,719 37
18 Lambton	6,424 95	79,348 62	37,560 75	123,334 32
19 Lanark	4,115 98	37,347 58	13,962 41	55,425 97
20 Leeds and Grenville	7,241 67	79,182 02	30,507 27	116,930 96
21 Lennox and Addington	3,833 48	33,511 45	16,589 80	53,934 73
22 Lincoln	2,812 50	34,095 81	16,225 81	53,134 12
23 Middlesex	7,350 95	89,650 71	38,113 54	135,114 80
24 Norfolk	3,799 40	42,536 28	25,609 88	71,945 56
25 Northumberland	4,256 75	47,973 13	22,357 04	74,586 92
26 Ontario	5,748 75	57,022 38	26,991 40	88,762 53
27 Oxford	5,146 75	59,481 71	39,874 25	104,502 71
28 Peel	2,716 31	34,636 41	17,528 53	54,881 25
29 Perth	4,531 25	52,170 62	29,622 14	86,324 01
30 Peterborough	4,397 55	40,787 21	11,918 43	57,103 19
31 Prescott and Russell	3,997 50	34,091 49	16,365 33	54,454 32
32 Prince Edward	2,340 75	25,996 92	10,790 02	39,127 69
33 Renfrew	6,459 00	45,381 67	19,284 47	71,125 14
34 Simcoe and W. Muskoka	16,806 11	105,154 82	52,097 03	174,057 96
35 Stormont	2,767 75	27,819 47	9,044 80	39,632 02
36 Victoria and S. E. Muskoka	9,359 25	50,912 67	20,101 60	80,373 52
37 Waterloo	4,030 00	50,997 58	42,594 68	97,622 26
38 Welland	3,546 74	40,882 94	21,815 32	66,245 00
39 Wellington	5,950 25	67,938 53	35,033 72	108,922 50
40 Wentworth	3,708 33	37,933 34	30,143 59	71,785 25
41 York	7,125 94	94,782 21	59,342 32	161,250 47
42 Rainy River and Thunder Bay	2,963 63	18,324 29	3,680 61	24,968 53
43 Algoma	16,629 20	39,299 74	17,873 17	73,802 11
44 N. Nipissing, etc., and W. Parry Sound	13,365 57	33,161 53	16,608 53	63,135 63
45 Moose Fort	150 00			150 00
Totals	251,208 40	2,245,734 38	1,079 804 46	3,576,747 24
Cities.				
1 Belleville	1,048 00	10,995 34	1,413 86	13,447 20
2 Brantford	2,086 55	30,000 00	3,774 26	35,860 81
3 Chatham	1,214 25	15,200 49	2,643 22	19,057 96
4 Guelph	1,672 30	30,293 31	2,205 70	34,171 31
5 Hamilton	6,855 40	119,206 15	27,296 55	146,358 10
6 Kingston	2,329 60	27,680 00	2,005 86	32,015 46
7 London	6,489 70	95,730 84	2,497 62	104,718 16
8 Ottawa	4,572 95	121,979 00	17,118 46	143,670 41
9 St. Catharines	1,179 00	13,679 00	1,008 75	15,866 75
10 St. Thomas	1,652 00	20,470 10	823 72	22,945 82
11 Stratford	1,682 65	15,000 00	4,510 69	21,193 34
12 Toronto	25,845 80	500,672 00	35,129 60	660,647 40
13 Windsor	1,555 00	25,000 00	462 49	27,017 49
14 Woodstock	1,377 00	15,336 56	2,228 30	18,941 86
Totals	59,560 20	1,134,032 79	103,119 08	1,296,712 07

(* Including grant of \$1,500 in re Normal School.

SCHOOLS.—Continued.

Financial Statement.

Expenditure.

Teachers' salaries.	Sites and building school houses.	Libraries, maps, apparatus, prizes and school books.	Rent and repairs, fuel and other expenses.	Total expenditure for all Public School purposes.	Balances.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
1 23,916 32	1,966 71	1,056 87	9,649 04	36,588 94	17,396 93
2 72,563 83	9,036 45	1,377 69	22,403 74	105,381 71	30,227 72
3 44,816 92	4,112 67	2,142 23	12,352 66	63,424 48	11,641 63
4 31,504 74	4,223 89	545 26	14,096 54	50,370 43	11,750 43
5 33,084 19	11,061 41	308 38	9,930 18	54,384 16	7,470 33
6 36,264 35	1,819 40	1,083 08	9,397 91	48,564 74	15,434 24
7 42,784 90	2,257 21	1,579 94	13,527 91	60,149 96	26,269 10
8 40,867 80	7,844 17	996 21	13,948 36	63,057 44	19,476 11
9 35,151 05	2,836 91	770 54	8,719 35	47,477 85	12,310 56
10 22,799 73	1,684 83	1,124 65	5,972 86	31,532 07	7,865 91
11 79,092 06	6,417 67	2,128 16	26,147 35	113,785 24	24,311 69
12 29,389 57	456 09	1,095 79	8,772 25	39,713 70	15,325 76
13 30,907 05	1,965 15	760 81	10,023 64	43,666 65	7,613 73
14 25,565 15	1,133 35	361 87	10,622 14	37,682 51	8,339 24
15 58,588 73	7,322 25	1,149 41	14,923 35	81,983 74	23,840 13
16 74,161 15	7,845 49	757 38	21,342 69	104,106 71	28,661 15
17 51,611 49	7,329 41	1,299 70	19,247 94	79,488 54	44,230 83
18 64,930 80	9,494 22	1,001 79	20,843 34	96,270 15	27,064 17
19 32,930 32	1,447 51	418 02	7,772 07	42,567 92	12,858 05
20 69,994 44	3,630 07	1,470 43	19,740 24	94,835 18	22,095 78
21 31,930 63	1,660 62	470 78	8,754 10	42,816 13	11,118 60
22 27,385 34	2,056 03	418 96	8,887 04	38,747 37	14,386 75
23 67,423 83	7,878 29	1,160 74	22,088 50	98,551 36	36,563 44
24 36,834 31	650 95	464 81	9,143 29	47,093 36	24,852 20
25 40,417 66	3,488 70	1,135 12	11,660 66	56,702 04	17,884 88
26 44,709 10	5,322 41	2,079 59	17,416 36	69,527 46	19,235 07
27 49,713 98	1,229 72	977 00	16,018 28	67,938 98	36,563 73
28 29,512 79	2,442 38	657 23	10,920 54	43,532 94	11,348 31
29 40,809 96	6,792 43	1,448 96	16,638 87	65,690 22	20,633 79
30 33,280 99	4,365 59	879 57	8,838 84	47,364 99	9,738 20
31 29,111 91	3,212 57	352 29	7,951 69	40,628 46	13,825 86
32 24,694 17	431 38	326 15	5,467 82	30,919 52	8,208 17
33 41,555 54	7,571 72	871 07	10,685 52	60,683 85	10,441 29
34 97,078 32	7,543 73	2,088 91	25,436 78	132,147 74	41,910 22
35 25,533 29	2,865 69	848 90	6,648 76	34,896 64	4,735 38
36 45,673 08	4,541 35	1,978 23	14,627 66	66,820 32	13,553 20
37 41,594 99	1,657 45	489 83	12,858 92	56,600 49	41,021 77
38 33,364 93	3,293 07	515 22	10,341 37	47,514 59	18,730 41
39 57,094 10	3,866 62	779 10	20,366 16	82,105 99	26,816 52
40 32,928 85	4,531 35	658 65	10,034 62	48,047 43	23,737 93
41 74,609 13	10,371 31	1,347 43	30,552 55	116,880 42	44,370 05
42 12,632 9	3,101 77	483 14	5,895 98	22,113 78	2,854 75
43 38,406 98	6,134 92	1,283 15	13,557 02	59,382 07	14,420 04
44 32,590 76	7,989 59	1,079 14	10,816 08	52,475 57	10,660 06
45 150 00				150 00	
1,889,961 32	196,728 76	44,222 78	594,040 97	2,724,953 83	851,793 41
1 9,208 53			3,795 54	13,004 37	443 13
2 22,017 15	181 81	1,784 12	11,877 73	35,860 81	
3 12,030 07		66 90	6,905 86	19,002 83	55 13
4 14,179 14	13,878 75	138 61	5,297 53	33,494 33	676 98
5 81,905 60	15,859 56	5,911 55	42,462 09	146,138 80	219 30
6 21,197 15		87 01	10,731 30	32,015 46	
7 66,070 69	7,984 56		30,662 91	104,718 16	
8 68,828 35	20,228 94	5,806 24	29,494 42	124,357 95	19,312 45
9 10,610 68			5,256 07	15,866 75	
10 17,130 77		15 50	4,884 50	22,030 87	914 95
11 12,396 95	1,124 65	1,452 64	6,219 10	21,193 34	
12 406,791 32	38,800 30	520 25	194,078 11	640,189 02	20,457 42
13 18,168 62	1,004 38	127 26	8,517 23	27,817 49	
14 12,317 50		1,041 00	4,867 43	18,225 93	715 93
772,852 52	99,062 95	16,951 08	365,050 22	1,253,916 77	42,795 30

THE PUBLIC

V.—Table E.—

Towns.	Receipts.			
	Legislative grant.	Municipal grants and assessments.	Clergy Reserve fund, balances and other sources.	Total receipts for all Public School pur- poses.
	\$ c.	\$ c.	\$ c.	\$ c.
1 Alexandria	65 00	773 22	851 37	1,689 59
2 Alliston	358 00	1,888 00	704 39	2,950 39
3 Almonte	283 00	3,777 47	667 32	4,727 79
4 Amherstburg	335 00	5,632 23	278 25	6,245 53
5 Arnprior	286 00	6,579 38	1,525 46	8,390 84
6 Aurora	195 00	2,576 00	763 51	3,533 51
7 Ayimer	297 90	4,664 26	56 80	5,018 96
8 Barrie	785 00	10,468 40	377 49	11,630 89
9 Berlin	1,388 60	22,399 76	769 88	24,558 24
10 Blenheim	305 00	3,696 89	799 46	4,800 34
11 Bothwell	202 00	1,613 00	522 82	2,337 82
12 Bowmanville	343 00	4,500 00	135 10	4,978 10
13 Bracebridge	1,011 00	4,225 90	710 19	5,946 19
14 Brampton	479 00	5,825 00	1,064 30	7,368 30
15 Brockville	964 00	14,700 00	1,374 85	17,038 65
16 Bruce Mines	300 00	1,503 00	103 74	1,906 74
17 Cache Bay	100 00	1,078 91	1,970 45	3,149 36
18 Carleton Place	504 00	5,800 00	258 68	6,562 68
19 Clinton	437 00	2,900 00	791 50	4,128 50
20 Cobourg	412 35	6,600 00	45 60	7,057 95
21 Collingwood	796 00	10,704 00	321 77	11,821 77
22 Copper Cliff	373 03	3,129 06	1,409 55	4,911 61
23 Cornwall	492 00	6,150 00	3,865 52	10,507 52
24 Deseronto	404 00	5,300 00	346 43	6,050 43
25 Dresden	295 00	2,475 00	584 91	3,354 91
26 Dundas	306 00	5,112 67	190 75	5,609 42
27 Dunnville	270 00	2,350 00	252 26	2,872 26
28 Durham	545 00	2,798 60	1,163 07	4,506 67
29 East Toronto	273 00	4,924 66	541 49	5,699 14
30 Essex	172 30	2,092 18	14 93	2,279 11
31 Forest	343 00	2,850 00	457 40	3,650 40
32 Fort Frances	74 00	2,325 00	591 10	2,990 10
33 Fort William	451 00	7,049 00	828 14	8,322 14
34 Galt	968 5	14,000 00	15 27	14,984 12
35 Gananoque	601 00	5,078 02	1,211 23	6,890 25
36 Goderich	591 00	5,825 85	.....	5,816 85
37 Gore Bay	510 00	1,780 00	111 56	2,401 56
38 Gravenhurst	260 00	3,794 44	106 78	4,161 22
39 Harriston	216 00	2,584 00	178 64	2,978 64
40 Hawkesbury	33 00	2,500 00	209 16	2,742 16
41 Hespeier	348 80	4,230 76	9,800 06	14,379 62
42 Huntsville	471 00	3,500 00	171 73	4,142 73
43 Ingersoll	674 05	5,900 30	781 66	7,355 71
44 Kincardine	429 00	2,982 00	680 90	4,091 90
45 Kingsville	253 00	3,357 82	2,950 74	6,561 56
46 Leamington	324 00	3,791 00	4,911 86	9,026 86
47 Lindsay	811 00	10,948 86	2,188 23	13,948 09
48 Listowel	325 00	3,774 00	88 97	4,188 97
49 Little Current	148 00	1,502 00	835 12	2,485 12
50 Mattawa	39 00	1,181 72	61 24	1,281 56
51 Meaford	382 00	3,193 00	211 23	3,786 23
52 Midland	471 00	6,071 00	257 37	6,799 37
53 Milton	511 00	2,776 79	653 93	3,941 72
54 Mitchell	381 00	2,969 00	241 68	3,594 68
55 Mount Forest	396 00	3,649 00	292 20	4,337 20
56 Napanee	498 00	6,150 00	172 73	6,820 73
57 New Liskeard	110 00	2,360 01	120 13	2,590 14
58 Newmarket	406 30	2,475 00	975 32	3,855 32
59 Niagara	118 00	2,005 74	171 26	2,325 00
60 Niagara Falls	541 00	15,088 45	119 95	15,749 40
61 North Bay	232 00	6,313 00	699 05	7,244 05
62 North Toronto	704 00	4,950 72	67 56	5,312 28
63 Oakville	186 00	3,629 25	49 00	3,864 25
64 Orangeville	605 00	6,450 00	200 71	7,255 71
65 Orillia	506 00	14,800 00	979 44	16,285 44
66 Oshawa	491 00	6,612 00	509 20	7,612 20
67 Owen Sound	1,255 60	14,930 00	522 72	16,708 32
68 Palmerston	322 00	3,250 00	260 82	3,832 82
69 Paris	333 00	4,800 00	775 35	5,908 35
70 Parkhill	146 00	2,225 00	86 53	2,457 53

SCHOOLS.—Continued.

Financial Statement.—Continued.

Expenditure.										Balances.	
Teachers' salaries.		Sites and building school houses.		Libraries, maps, apparatus, prizes and school books.		Rent and repairs, fuel and other expenses.		Total expenditure for all Public School purposes.			
\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.
1	715 00	5 60				888 86		1,609 46		80 13	
2	2,127 30					669 46		2,796 76		153 68	
3	3,587 06					1,140 73		4,727 79			
4	2,582 15			14 37		2,178 80		4,775 32		1,470 21	
5	3,471 50					901 97		4,373 47		4,017 37	
6	2,139 07			25 78		674 02		2,738 87		794 64	
7	3,163 32	349 82		46 27		1,206 84		4,765 25		253 71	
8	8,245 92	573 00		73 25		2,531 44		11,423 61		207 28	
9	11,973 89	6,338 70		770 73		4,860 59		23,943 91		614 33	
10	2,827 00	353 63				1,149 77		4,330 40		469 94	
11	1,644 17					309 89		1,954 06		383 76	
12	4,171 07	62 86				624 04		4,857 96		120 14	
13	4,532 72	290 40		58 52		1,051 91		5,933 55		12 64	
14	3,722 43	422 25		180 00		2,995 74		7,320 42		47 88	
15	8,957 01					7,151 23		16,108 24		930 61	
16	1,470 00	2 75				410 66		1,883 41		23 33	
17	650 00	1,779 67				719 69		3,149 36			
18	4,625 00	426 77		24 22		1,453 76		6,529 75		32 83	
19	2,982 00			14 50		968 47		3,954 97		173 53	
20	4,489 03	146 71		14 40		2,392 28		7,042 42		15 53	
21	8,415 24	241 27				2,992 48		11,648 99		172 78	
22	2,688 00	180 93		49 65		1,481 11		4,399 69		511 92	
23	4,797 92	3,589 63				1,267 10		9,654 55		852 87	
24	4,619 35					1,201 59		5,820 94		229 49	
25	2,730 95			46 54		568 20		3,345 69		9 22	
26	4,165 63					1,297 38		5,463 01		146 4	
27	2,402 74					469 52		2,872 26			
28	2,936 82	891 44		52 54		623 41		4,504 22		2 45	
29	4,034 50			140 31		1,428 32		5,603 13		96 01	
30	1,885 00			6 00		344 49		2,235 49		43 62	
31	2,429 00					784 29		3,213 29		437 11	
32	1,427 37	397 47		233 47		826 20		2,884 51		105 59	
33	5,033 97			351 99		2,942 18		8,328 14			
34	11,061 07			25 55		3,862 14		14,948 76		35 36	
35	4,637 74					1,882 47		6,520 41		370 04	
36	4,443 69					1,373 16		5,816 85			
37	1,606 25					332 69		1,938 94		462 62	
38	3,068 51			24 08		1,004 45		4,097 04		64 18	
39	1,890 00	152 79				909 01		2,951 80		26 24	
40	1,227 33	500 00				476 60		2,203 93		538 27	
41	3,338 50	9,664 79				1,376 33		14,379 62			
42	3,906 83	229 26		68 95		835 25		4,040 28		102 45	
43	5,230 00			51 45		2,068 24		7,349 69		6 02	
44	2,750 05					1,159 04		3,909 09		182 81	
45	2,756 45	77 66		70 23		3,617 97		6,522 33		39 23	
46	3,128 85	4,553 90				1,208 06		8,890 81		136 05	
47	9,014 02			52 15		4,881 92		13,948 09			
48	3,064 08			198 33		800 32		4,063 23		125 74	
49	1,296 50			15 00		666 51		1,977 11		508 01	
50	906 23			35 35		258 47		1,199 55		82 01	
51	2,880 00					906 23		3,786 23			
52	5,255 88			127 47		1,039 12		6,422 47		376 90	
53	2,907 50	336 54				573 04		3,817 08		124 64	
54	2,725 00	277 37		79 55		445 78		3,527 70		66 98	
55	3,041 50			47 72		983 44		4,072 66		264 54	
56	3,333 30			18 20		2,394 03		6,745 53		75 20	
57	1,013 46	592 84		354 15		337 50		2,297 95		292 19	
58	2,520 00					868 61		3,388 61		467 71	
59	1,600 00			20 00		258 64		1,878 64		446 36	
60	5,338 75	7,720 62		39 65		2,219 40		15 318 42		430 98	
61	2,480 44	592 50		69 13		3,712 80		6,854 87		389 18	
62	3,407 29			118 00		1,595 66		5,120 95		191 33	
63	1,265 00	60 75		67 50		2,471 00		3,864 25			
64	3,950 48			35 15		2,873 48		6,859 11		396 60	
65	6,963 30			349 36		2,327 29		9,639 95		6,645 49	
66	2,621 19	652 75		74 94		1,263 32		7,612 20			
67	11,215 00	157 27				3,448 20		45,420 47		1,287 25	
68	7,629 70			32 40		1,034 62		3,696 72		136 10	
69	3,872 50					2,027 83		5,900 33		8 02	
70	1,696 25			18 50		591 77		2,306 52		151 01	

THE PUBLIC

V.—Table E.—

Towns.	Receipts.			
	Legislative grants.	Municipal grants and assessments.	Clergy Reserve fund, balances and other sources.	Total receipts for all Public School purposes.
	\$ c.	\$ c.	\$ c.	\$ c.
71 Parry Sound	1,058 00	6,110 50	187 58	7,356 08
72 Pembroke	334 00	4,759 00	454 19	5,547 19
73* Penetanguishene	393 00	3,796 14	472 92	4,662 06
74 Perth	457 00	3,859 09	831 91	5,148 00
75 Peterborough	1,141 50	17,500 05	2,959 70	21,601 20
76 Petrolea	480 00	7,500 06	461 71	8,440 71
77 Picton	583 00	8,150 00	3,945 36	9,678 36
78 Port Arthur	296 00	5,155 00	831 57	6,282 57
79 Port Hope	653 00	6,350 00	612 60	7,615 00
80 Prescott	436 00	3,725 00	319 23	4,480 23
81 Preston	260 10	3,600 00	1,916 95	5,777 05
82 Rat Portage	718 00	10,116 74	199 85	11,034 59
83 Renfrew	385 00	5,595 05	686 48	6,666 53
84 Ridgetown	277 00	3,198 23	339 06	3,814 29
85 St. Marys	418 00	7,194 85	473 84	8,086 69
86 Sandwich	72 00	1,250 00	1,419 49	2,741 49
87 Sarnia	1,010 00	13,050 60	6,429 57	20,490 17
88 Sault Ste. Marie	871 00	12,693 00	856 87	14,420 87
89 Seaforth	206 03	2,600 00	1,049 91	3,855 91
90 Simcoe	533 65	4,712 15	172 45	5,418 45
91 Smith's Falls	743 00	7,911 09	345 50	8,999 59
92 Stayner	342 00	1,400 30	1,281 12	3,023 12
93 Strathroy	508 00	4,056 00	410 55	4,974 55
94 Sturgeon Falls	132 00	2,545 92	72 78	2,750 66
95 Sudbury	109 00	1,800 00	528 60	2,437 60
96 Thessalon	191 00	1,859 60		2,050 60
97 Thornbury	118 00	1,206 64	302 77	1,626 81
98 Thorold	184 00	2,645 00	447 78	3,276 78
99 Tillsonburg	289 20	3,909 35	163 02	4,362 17
100 Toronto Junction	1,075 05	18,479 00	1,047 60	20,601 65
101 Trenton	376 00	4,554 73	625 36	5,555 69
102 Uxbridge	208 00	2,505 00	393 05	3,106 05
103 Vankleek Hill	283 00	2,110 25	814 72	3,207 97
104 Walkerton	400 00	3,903 70	343 50	4,647 20
105 Walkerville	230 00	5,000 00	208 43	5,438 43
106 Wallaceburg	504 00	4,540 49	97 50	5,141 99
107 Waterloo	375 00	6,691 08	511 57	7,577 65
108 Welland	380 00	2,900 00	1,765 97	5,045 97
109 Whithy	394 00	4,400 00	335 83	5,129 83
110 Wiarton	280 00	3,600 00	152 74	4,032 74
111 Wingham	459 00	4,122 02	146 65	4,727 67
Totals	47,195 65	577,340 99	90,615 53	715,152 17
Totals.				
1 Counties, etc	251,208 40	2,245,734 38	1,079,804 46	3,576,747 24
2 Cities	59,560 20	1,134,032 79	103,119 08	1,796,712 07
3 Towns	47,195 65	577,340 99	90,615 53	715,152 17
4 Grand Totals, 1903	357,964 25	3,957,108 16	1,273,539 07	5,588,611 48
5 do do 1902	353,194 39	3,666,563 59	1,261,241 33	5,280,999 31
6 Increases	4,769 86	290,544 57	12,297 74	307,612 17
7 Decreases				
8 Percentages	6.4	70.81	22.79	

Cost per pupil: Counties, etc., \$9.95; Cities, \$18.96; Towns, \$10.68; Province, \$11.54.

SCHOOLS—*Concluded.*Financial Statement.—*Concluded.*

Expenditure.						Balances.
Teachers' salaries.	Sites, and building school houses.	Libraries, maps, apparatus, prizes and school books.	Rent and repairs, fuel and other expenses.	Total expenditure for all Public School purposes.		
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
71 4,687 68		77 56	2,581 37	7,346 61	9 47	
72 3,953 30		2 50	1,591 39	5,547 19		
73 3,326 46	258 50	33 25	760 60	4,378 81	283 25	
74 3,471 50			1,613 3	5,085 43	62 67	
75 14,268 15			7,336 05	21,601 20		
76 5,825 00			2,615 71	8,440 71		
77 4,752 14	4 00	129 74	1,496 66	6,382 54	3,295 82	
78 4,062 17	278 45		1,814 74	6,155 36	127 21	
79 5,585 00			2,030 00	7,615 00		
80 3,126 16		10 00	1,293 09	4,429 25	60 98	
81 3,124 87		129 46	1,072 83	4,327 16	1,449 99	
82 6,878 71		29 95	3,825 93	10,734 59	300 00	
83 3,437 00	528 25	76 33	2,490 01	6,531 59	134 94	
84 2,887 52			873 83	3,761 35	52 94	
85 3,576 00	2,694 00	29 00	1,609 44	7,908 44	178 25	
86 850 00			654 47	1,502 47	1,239 02	
87 8,824 88	4,746 00	29 22	6,341 25	19,941 35	548 82	
88 8,148 76		427 11	5,617 48	14,193 35	227 52	
89 2,227 62			726 35	2,953 97	901 94	
90 4,480 07			491 23	4,971 36	447 09	
91 6,619 50		75 91	2,307 99	8,999 40	19	
92 1,975 28		287 66	565 00	2,827 94	195 18	
93 4,044 00			925 77	4,969 77	4 78	
94 1,583 15	135 00		994 18	2,712 33	38 33	
95 1,885 00			432 95	2,317 95	119 65	
96 1,555 00		11 35	441 41	2,007 76	42 24	
97 1,325 00		32 60	267 67	1,625 27	1 54	
98 2,165 84		15 10	1,075 97	3,256 91	19 87	
99 3,176 50		33 64	1,142 36	4,352 50	9 67	
100 12,678 25	1,000 00		6,625 77	20,304 02	297 63	
101 3,322 08		200 00	1,217 80	4,739 88	815 81	
102 2,455 17			423 63	2,876 80	229 25	
103 1,920 00	665 25		492 05	3,077 30	130 67	
104 3,511 81		25 10	1,036 30	4,573 21	73 99	
105 3,393 38		291 40	1,729 97	5,414 75	23 48	
106 3,445 85		64 19	1,594 51	5,104 55	37 44	
107 5,052 78		184 03	2,224 34	7,461 15	116 50	
108 2,195 74	40 68	27 00	728 36	2,991 78	2,054 19	
109 3,700 00			1,429 83	5,129 83		
110 2,980 00	191 27		749 09	3,920 36	112 38	
111 3,567 43		23 73	1,136 51	4,727 67		
433,318 52	52,163 32	6,341 70	182,856 20	674,679 74	40,472 43	
1 1,889,961 32	196,728 76	44,222 78	594,040 97	2,724,953 83	851,793 41	
2 772,852 52	99,062 95	16,951 08	365,050 22	1,253,916 77	42,795 30	
3 433,318 52	52,163 32	6,341 70	182,856 20	674,679 74	40,472 43	
4 3,096,132 36	347,955 03	67,515 56	1,141,947 39	4,653,550 34	935,061 14	
5 2,987,932 88	331,842 08	80,565 47	989,378 68	4,389,719 11	891,280 20	
6 108,199 40	16,112 95		152,568 71	263,831 23	43,780 94	
7		13,049 91				
8 66.53	7.48	1.45	24.54			

* Including Protestant Separate School.

ROMAN CATHOLIC

I.—Table F.—Financial

Counties, (including incorporated villages but not cities or towns,) etc.	Number of schools.	Receipts.				Expendi-			
		Legislative grants.	School rate on supporters.	Balances, subscribed and from other sources.	Total amount received.	Teachers' salaries.			
		\$	¢	\$	¢	\$	¢	\$	¢
1 Bruce	7	433	00	5,678	09	2,788	01	8,899	10
2 Carleton	16	1,086	00	7,547	55	5,300	67	12,924	22
3 Essex	26	1,488	00	10,866	20	9,086	83	21,441	03
4 Frontenac	12	555	00	3,448	96	1,311	54	5,815	50
5 Grey	7	249	60	2,070	18	825	04	3,144	82
6 Hastings	7	277	00	1,789	09	484	78	2,550	87
7 Huron	8	213	00	3,335	52	382	48	4,921	00
8 Kent	9	327	00	3,584	12	1,952	34	5,963	46
9 Lambton	2	57	00	571	45	251	02	879	47
10 Lanark	3	147	00	728	40	114	75	990	15
11 Leeds and Grenville	5	324	00	1,304	56	246	16	1,874	72
12 Lennox and Addington	2	117	00	496	08	102	57	715	65
13 Lincoln	6	91	00	938	40	459	48	1,488	88
14 Middlesex	6	174	00	1,805	83	1,102	35	3,082	18
15 Norfolk	1	48	00	378	67	257	24	681	91
16 Northumberland	6	224	00	2,001	72	908	04	3,133	76
17 Ontario	1	65	00	205	33	742	81	1,013	14
18 Peel	1	63	00	137	18	41	65	241	83
19 Perth	6	142	00	2,070	12	1,175	13	3,287	25
20 Peterborough	1	20	00	325	38	24	50	369	88
21 Prescott and Russell	72	2,943	00	25,150	74	12,225	97	40,319	71
22 Renfrew	12	1,133	00	3,366	05	3,095	08	7,594	13
23 Simcoe	3	272	00	1,398	39	216	86	1,787	25
24 Stormont, Dundas and Glen- Garry	11	896	00	3,861	70	1,526	52	6,254	22
25 Waterloo	7	286	00	4,630	71	2,259	85	7,176	56
26 Wellington	8	232	00	3,570	89	1,076	88	4,879	77
27 Wentworth	1	46	00	131	00	72	00	249	00
28 York	2	41	00	534	01	239	75	814	76
29 Districts	23	1,925	00	5,884	26	3,249	98	11,009	24
Totals	267	13,874	60	98,258	58	52,020	28	164,153	46
Cities.									
1 Belleville	3	276	00	2,012	71	1,175	04	3,463	75
2 Brantford	2	232	00	2,038	80	1,498	53	3,769	33
3 Chatham	1	197	00	1,942	16	853	50	2,497	66
4 Guelph	1	230	00	2,940	04	269	50	3,439	54
5 Hamilton	8	1,089	00	11,000	00	2,452	14	14,541	14
6 Kingston	3	448	00	3,383	59	7,912	92	11,744	51
7 London	7	647	00	8,057	71	3,488	45	12,193	16
8 Ottawa	24	4,010	00	45,175	00	10,848	05	59,533	05
9 St. Catharines	3	274	00	4,090	39	244	87	4,609	26
10 St. Thomas	1	170	00	1,287	41	36	76	1,494	17
11 Stratford	1	236	00	2,362	70	698	73	3,297	43
12 Toronto	22	3,679	00	47,554	91	11,095	55	62,329	46
13 Windsor	2	344	00	5,466	87	870	99	6,481	86
14 Woodstock	1	69	00	531	00	275	00	875	00
Totals	86	11,901	00	137,843	29	40,525	03	190,269	32

SEPARATE SCHOOLS.

Statement, Teachers, etc.

ture.										Teachers.											
Sites and building school houses.		Maps, apparatus, prizes, and libraries, etc.		All other purposes.		Total amount expended.		Balances.		Number of teachers.		Male.		Female.		Average salary male.		Average salary female. (In addition, members of Religious Orders received free residence).			
\$	¢	\$	¢	\$	¢	\$	¢	\$	¢							\$	\$				
1	1,678	83	2	52	2,004	47	7,425	82	1,473	28	16	4	12	193	189						
2	712	80	3	15	2,230	17	12,998	70	2,985	62	28	1	27	052	206						
3	994	83	657	36	4,404	15	19,372	37	2,068	66	40	7	83	004	239						
4	743	52	2	50	847	24	4,631	76	683	74	12	2	10	233	244						
5	71	70	59	25	354	04	2,299	99	844	83	7	7	7	259	259						
6	129	00	37	30	230	11	3,152	91	397	96	7	2	7	254	254						
7	223	13	32	05	769	87	3,635	30	1,285	30	9	2	9	053	277						
8	424	57	53	00	957	13	4,761	72	1,207	74	11	2	9	524	274						
9	140	45			71	65	752	10	127	87	2	2	9		270						
10	2	40			88	75	814	15	176	00	3	3	3		195						
11	21	90	2	78	443	86	1,843	84	30	88	3	2	3		275						
12	60	50			89	87	700	28	104	21	2	2	4		200						
13	343	00	1	20	240	47	1,384	67	226	84	6	6	4		272						
14	733	03	89	98	332	33	2,855	34	282	51	1	1	1		325						
15					74	40	399	40	389	49	7	1	6		225						
16	36	62	79	00	989	90	2,744	27	140	99	1	1	1		220						
17			2	43	148	89	872	15	718	35	1	1	6		293						
18					21	83	701	83	4	63	1	1	1		260						
19	240	00	5	60	571	40	2,688	90	718	35	1	1	6		260						
20	4	65			99	33	365	35	4	53	1	1	1		223						
21	5,975	02	356	45	4,388	37	30,906	35	9,413	36	93	9	84		272						
22	739	31	82	06	1,039	96	5,262	38	2,331	75	15	1	14		295						
23	24	95	64	40	184	78	1,519	13	268	12	5	1	4		425						
24	1,033	20	84	26	901	75	5,012	21	1,272	01	14	2	12		315						
25	246	48	11	75	788	30	3,921	53	3,255	03	12	2	10		345						
26	218	25	12	70	1,034	29	3,630	94	1,248	88	10	2	10		239						
27					24	00	249	00			1	1	1		225						
28					317	35	812	35	2	41	2	2	2		247						
29	1,266	50	264	89	2,100	46	9,771	22	1,238	02	25	4	21		344						
23,064		44	2,220		03	25,807		12	134,006		05	30,147		41	350		39	311		334	234
1	15	58			1,392	66	3,363	24	100	51	6	1	5		600	200					
2	360	11			2,150	19	3,610	30	159	03	5		5			220					
3	29	25	10	65	1,094	32	2,324	22	163	44	6		6			200					
4	60	00	200	00	1,231	60	3,391	60	47	94	8		8			237					
5	2,985	46	1,132	02	3,846	04	14,191	87	349	27	37		37			180					
6	838	35			6,166	11	11,620	40	124	11	13	1	12		700	229					
7	3,575	10	200	00	4,624	97	11,700	07	493	09	19		19			200					
8	10,279	00	180	00	22,181	28	58,940	23	592	82	104	20	84		457	216					
9	1,348	06			1,252	08	4,606	32	2	44	9	1	8		600	180					
10					478	10	1,478	10	16	07	5		5			200					
11	500	00	250	10	356	98	2,907	08	390	35	6		6			217					
12	14,135	52	1,963	05	20,083	25	59,381	82	2,947	64	103	26	77		323	200					
13	735	00	17	83	300	83	6,481	86			13		13			417					
14					200	00	875	00			2		2			337					
34,861		43	3,953		65	65,758		36	184,882		61	5,386		71	386		49	287		397	215

ROMAN CATHOLIC

I.—Table F.—Financial Statement.

Towns.	Number of schools.	Receipts.				Expend.	
		Legislative grants.	School rate on supporters.	Balances, subscribed and from other sources.	Total amount received.	Teachers' salaries.	
		\$	¢	\$	¢	\$	¢
1 Alexandria	2	151	00	2,083	55	536	34
2 Almonte	1	97	00	1,068	47	359	31
3 Amherstburg	1	225	00	3,026	45	254	03
4 Arnprior	2	178	00	2,217	84	790	73
5 Barrie	1	112	00	1,361	85	1,366	94
6 Berlin	1	290	00	2,832	25	870	53
7 Brockville	1	261	00	2,460	00	167	08
8 Cobourg	1	157	00	1,000	00	108	13
9 Cornwall	3	422	00	4,450	00	1,559	58
10 Dundas	1	86	00	1,624	32	1,342	68
11 Fort William	1	136	00	1,007	75	1,116	90
12 Galt	1	57	00	592	53	27	85
13 Goderich	1	53	00	462	30	74	78
14 Hawkesbury	1	227	00	3,318	00	3,545	00
15 Ingersoll	1	58	00	851	44	263	21
16 Lindsay	2	184	00	2,865	63	454	58
17 Mattawa	1	183	00	315	00	1,225	86
18 Newmarket	1	36	00	261	47	148	57
19 Niagara Falls	1	104	00	804	38	375	55
20 North Bay	2	123	00	1,654	00	273	58
21 Oakville	1	22	00	225	00	116	00
22 Orillia	1	127	00	1,543	42	1,424	66
23 Oshawa	1	59	00	422	12	248	10
24 Owen Sound	1	76	00	1,041	62	836	64
25 Paris	1	45	00	443	61	580	63
26 Parkhill	1	27	00	346	34	46	87
27 Pembroke	1	299	00	3,027	05	488	23
28 Perth	1	142	00	955	54	209	00
29 Peterborough	3	420	00	5,667	60	145	91
30 Picton	1	40	00	600	99	493	15
31 Port Arthur	1	107	00	1,200	00	11,608	77
32 Prescott	1	120	00	1,142	27	721	65
33 Preston	1	56	00	331	54	315	69
34 Rat Portage	2	109	00	1,600	00	657	59
35 Renfrew	2	166	00	1,987	60	1,356	51
36 St. Mary's	1	45	00	398	07	280	25
37 Sandwich	1	112	00	1,350	00	4,878	18
38 Sarnia	1	121	00	1,425	00	488	81
39 Sault Ste. Marie	1	180	00	3,582	69	390	40
40 Seaforth	1	56	00	706	86	11	45
41 Sturgeon Falls	1	144	00	1,813	15	1,327	85
42 Surbury	1	138	00	1,548	47	672	25
43 Thorold	1	86	00	700	00	179	65
44 Trenton	1	129	00	1,394	05	668	69
45 Vankleeckhill	1	149	00	869	00	437	25
46 Walkerton	1	121	00	777	90	154	55
47 Wallaceburg	1	77	00	1,266	45	367	92
48 Waterloo	1	72	00	936	90	298	79
49 Whitby	1	31	00	222	64	256	50
Totals	59	6,416	00	70,683	11	40,873	17
Totals.						117,972	28
*1 Counties, etc.	267	13,874	60	98,258	58	52,020	28
2 Cities	86	11,901	00	137,843	29	40,525	03
3 Towns	59	6,416	00	70,683	11	40,873	17
4 Grand totals, 1903	412	32,191	60	306,784	98	133,418	48
5 Grand totals, 1902	391	30,471	68	293,348	45	161,682	86
6 Increases						485,502	99
7 Decreases	21	1,719	92	13,436	53	28,264	38
8 Percentages						13,107	93
		6.81		64.94		28.24	
							50.4

*In incorporated villages included with Counties, etc., there were 44 teachers, all female. Note—Cost per pupil.

SEPARATE SCHOOLS.—Continued.

Teachers, etc.—Concluded.

Cur.					Teachers.				
Sites and building school houses.	Maps, apparatus, prizes, and libraries, etc.	All other purposes.	Total amount expended.	Balances.	Number of teachers.	Male.	Female.	Average salary, male.	Average salary female. (In addition members of Religious Orders received free residence.)
\$	\$	\$	\$	\$				\$	\$
1 405 61	8 00	612 42	2,726 03	44 86	7		7		243
2 37 00	50 00	672 78	1,524 78		3		3		255
3 54 00		1,024 24	2,278 24	1,227 24	6		6		240
4 238 42		858 59	2,647 01	539 56	6	1	5	600	200
5 320 97	30 55	1,591 17	2,812 14	28 65	4		4		225
6 655 10	38 82	1,787 93	2,673 58	319 20	8		8		200
7		631 00	2,469 32	418 76	8		8		225
8		320 48	1,220 48	44 65	4		4		225
9	25 00	2,217 33	6,431 58		15	1	14	675	224
10 1,606 88	39 75	304 82	2,511 70	541 30	3		3		200
11 850 68	15 05	494 92	2,260 65		3		3		360
12 99 00		223 53	647 53	29 85	1		1		325
13	7 00	148 46	555 46	34 62	2		2		290
14 175 00	10 00	1,200 00	3,545 00		12		12		180
15	61 18	391 14	1,027 32	145 33	2		2		237
16		797 70	2,962 40	41 81	7	1	6	750	250
17 31 65	24 81	445 62	1,723 86		5	1	4	650	225
18		63 54	363 54	82 50	1		1		300
19	125 00	480 80	1,205 80	78 13	3		3		200
20 384 00	30 80	322 38	2,050 68		4		4		331
21	13 00	100 00	363 00		1		1		250
22 2 10	23 29	271 29	1,637 53	1,457 56	4		4		325
23	9 60	319 72	729 22		2		2		200
24 228 80	18 00	168 05	914 85	1,039 41	2		2		250
25	1 84	184 54	586 38	482 86	2		2		200
26 45 86		45 17	391 03	29 18	1		1		300
27 289 23		930 98	3,633 96	180 32	10	1	9	550	211
28 268 34		230 00	1,298 34	8 20	4		4		200
29 126 45	96 33	1,738 73	6,233 51		14	1	13	700	283
30		92 73	542 73	491 41	2		2		225
31 10,882 00		585 52	12,907 52	3 25	4		4		300
32 12 60		287 57	1,467 56	516 36	4		4		292
33 12 50		132 63	495 13	208 10	1		1		350
34 136 00	2 45	539 07	2,229 52	137 07	4	2	2	450	290
35		1,071 05	2,337 19	1,172 92	6	1	5	460	225
36 60 90		152 65	563 55	159 77	1		1		350
37 5,015 70		513 10	6,180 30	159 88	4		4		200
38		820 00	1,420 00	614 81	4		4		200
39 50 00		2,851 75	4,101 75	51 34	4		4		300
40		265 81	774 31		2		2		254
41	48 20	1,849 29	2,207 49	577 51	4		4		287
42		1,254 72	2,354 72	4 00	4		4		275
43 6 50		318 36	874 86	90 79	3		3		200
44 596 50	143 80	503 97	1,944 27	147 47	4		4		175
45 17 50			1,017 50	437 75	6		6		167
46 21 25		378 04	999 29	64 16	4		4		160
47		195 85	1,045 85	865 52	2	1	1	550	300
48 129 72		348 72	1,078 44	281 25	3		3		167
49 150 58		14 95	465 63	44 61	1		1		390
22,935 74	796 37	31,061 11	105,430 33	12,541 95	210	10	200	583	235
1 23,064 44	2,220 03	25,807 12	134,006 05	30,147 41	350	39	311	334	234
2 34,861 43	3,953 65	65,758 36	184,882 61	5,386 71	336	49	287	397	215
3 22,935 74	796 37	31,061 11	105,430 33	12,541 95	210	10	200	583	235
4 80,861 61	6,970 05	122,626 59	424,318 99	48,076 07	896	98	798	391	228
5 100,910 51	6,167 85	118,173 11	435,440 75	50,062 24	870	94	776	366	224
6	812 20	4,453 48			26	4	22	25	4
7 20,048 90		11,121 76		1,986 17					
8 19.06	1.64	28.9				10.94	89.06		

ROMAN CATHOLIC

II.—Table G.—Attendance, Pupils in the

Counties, (including incorpo- rated villages but not cities or towns), etc.	Number of pupils.	Boys.	Girls.	Average daily attendance.	Percentage of average to total attendance.	Reading								Writing.	Arithmetic.
						First Reader, Part I.	First Reader, Part II.	Second Reader.	Third Reader.	Fourth Reader.	Fifth Reader.				
1 Bruce	325	445	390	563	67	171	106	250	162	144	2	835	835		
2 Carleton	1,549	752	797	916	59	473	313	341	252	155	10	1,549	1,549		
3 Essex	2,261	1,198	1,063	1,265	56	807	400	419	363	270	12	2,261	2,261		
4 Frontenac	428	211	217	224	52	98	51	57	95	113	14	428	428		
5 Grey	269	131	138	116	43	69	33	60	58	47	4	269	269		
6 Hastings	270	126	134	127	47	76	45	60	44	53	2	270	270		
7 Huron	422	222	200	197	47	73	44	86	82	116	22	422	422		
8 Kent	577	312	265	301	54	248	77	87	65	77	23	577	577		
9 Lambton	71	37	34	34	48	16	7	11	20	15	2	71	71		
10 Lanark	104	57	47	50	48	34	16	20	11	23	...	104	104		
11 Leeds & Gren	196	90	106	124	63	38	25	25	22	24	42	196	196		
12 Lennox & Add..	89	45	44	48	62	31	6	27	11	22	2	89	89		
13 Lincoln	136	70	66	96	70	33	22	21	24	26	...	136	136		
14 Middlesex	172	94	78	101	69	17	30	21	39	55	10	172	172		
15 Norfolk	77	37	40	47	61	22	7	14	20	14	...	77	77		
16 Northumberl'd ..	225	114	111	140	62	64	31	30	50	41	9	225	225		
17 Ontario	91	43	48	53	58	14	13	13	18	17	6	91	91		
18 Peel	23	12	11	13	56	2	1	4	10	6	1	23	23		
19 Perth	288	155	133	155	54	64	42	69	62	67	3	288	288		
20 Peterborough ..	32	15	17	17	53	5	7	5	6	9	...	32	32		
21 Pres. & Russell..	5,536	2,720	2,816	3,003	54	2,646	1,052	880	610	332	16	5,536	5,536		
22 Renfrew	757	378	379	406	53	232	109	126	136	93	61	757	757		
23 Simcoe	188	101	87	118	63	61	37	38	30	27	6	188	188		
24 Storm't, Dundas & Glengarry	799	376	423	412	51	315	154	111	100	81	6	799	799		
25 Waterloo	565	305	260	328	58	131	83	157	131	62	1	565	565		
26 W. lington	437	235	202	272	62	94	59	107	78	92	7	437	437		
27 Westworth	20	11	9	6	25	2	6	6	4	4	...	20	20		
28 York	71	42	37	51	64	26	13	30	8	2	...	71	71		
29 Districts	1,371	708	663	685	42	784	206	217	104	54	6	1,371	1,371		
Totals	17,867	9,052	8,815	9,773	54	6,626	2,995	3,307	2,623	2,050	266	17,867	17,867		
Cities.															
1 Belleville	377	204	173	259	68	82	73	63	58	106	...	377	377		
2 Brantford	320	154	166	225	70	63	54	80	60	63	...	320	320		
3 Chatham	360	192	168	213	59	85	74	69	82	60	...	360	360		
4 Guelph	367	183	184	234	77	67	58	101	73	68	...	367	367		
5 Hamilton	1,644	828	806	1,208	73	479	238	300	302	226	99	1,644	1,644		
6 Kingston	805	407	398	572	71	165	124	155	177	131	53	805	805		
7 London	780	415	365	623	80	173	125	171	142	169	...	780	780		
8 Ottawa	5,905	3,087	2,868	3,872	65	2,021	1,092	1,159	1,040	482	101	5,905	5,905		
9 St. Catharines...	328	165	163	270	82	98	36	71	40	83	...	328	328		
10 St. Thomas	240	123	117	199	83	50	40	49	44	67	...	240	240		
11 Stratford	351	184	167	226	64	108	60	48	55	80	...	351	351		
12 Toronto	5,085	2,625	2,460	3,449	68	1,307	876	1,203	1,099	599	201	5,085	5,085		
13 Windsor	771	401	370	647	71	214	214	132	133	78	...	771	771		
14 Woodstock	114	56	58	70	61	27	18	17	30	22	...	114	114		
Totals	17,447	8,984	8,463	12,017	69	4,939	2,382	3,623	3,330	2,314	454	17,447	17,447		

ROMAN CATHOLIC

II.—Table G.—Attendance, Pupils in the

Towns.	Number of pupils.	Boys.	Girls.	Average daily attendance.	Percentage of average to total attendance.	Reading.					Writing.	Arithmetic.
						First Reader, Part I.	First Reader, Part II.	Second Reader.	Third Reader.	Fourth Reader.	Fifth Reader.	
1 Alexandria	458	196	262	242	53	180	46	99	65	68	458	458
2 Almonte	144	79	65	86	60	51	14	32	17	30	144	144
3 Amherstburg	288	125	163	192	67	60	43	59	44	47	288	288
4 Arnprior	404	216	188	255	63	111	59	50	109	75	404	404
5 Barrie	156	75	81	111	71	34	15	37	27	43	156	156
6 Berlin	477	253	224	338	71	76	55	134	136	76	477	477
7 Brookville	405	181	224	274	68	92	53	93	93	74	405	405
8 Cobourg	225	117	108	145	64	61	22	40	46	56	225	225
9 Cornwall	930	452	478	606	65	290	199	223	117	101	930	930
10 Dundas	132	64	68	66	50	19	35	37	19	22	132	132
11 Fort William	196	105	91	130	66	63	24	56	25	28	196	196
12 Galt	74	33	41	57	77	11	12	18	19	14	74	74
13 Goderich	63	32	31	54	86	15	11	7	16	14	63	63
14 Hawkesbury	827	408	419	608	73	319	190	183	87	48	827	827
15 Ingersoll	69	30	39	56	81	17	15	12	16	9	69	69
16 Lindsay	376	143	228	258	68	76	45	70	76	72	376	376
17 Mattawa	278	124	154	178	64	79	48	56	39	45	278	278
18 Newmarket	58	32	26	36	62	17	9	4	14	14	58	58
19 Niagara Falls	157	87	70	106	67	38	20	33	38	28	157	157
20 North Bay	296	150	146	184	62	119	41	49	46	41	296	296
21 Oakville	45	27	18	26	58	12	5	12	5	11	45	45
22 Orillia	231	129	102	178	77	42	32	57	48	52	231	231
23 Oshawa	90	37	53	64	71	14	11	19	28	30	90	90
24 Owen Sound	116	57	59	79	68	35	8	17	26	20	116	116
25 Paris	65	29	36	49	75	10	6	12	17	20	65	65
26 Parkhill	51	24	27	29	57	7	6	15	10	13	51	51
27 Pembroke	574	299	275	372	65	149	120	118	106	82	574	574
28 Perth	249	132	117	180	72	82	36	80	66	65	249	249
29 Peterborough	779	408	371	498	64	194	145	167	157	116	779	779
30 Picton	53	27	26	36	68	14	8	9	11	11	53	53
31 Port Arthur	226	114	112	149	66	67	25	45	40	49	226	226
32 Prescott	199	112	87	117	59	47	12	37	39	64	199	199
33 Preston	89	49	40	65	73	25	7	16	28	13	89	89
34 Rat Portage	219	100	119	142	65	76	40	25	50	28	219	219
35 Renfrew	276	145	131	202	73	89	51	54	63	29	276	276
36 St. Marys	74	30	44	50	67	17	11	10	12	24	74	74
37 Sandwich	187	87	100	97	52	79	20	48	22	18	187	187
38 Sarnia	222	112	110	142	64	47	33	50	53	39	222	222
39 Sault Ste. Marie	258	131	127	139	54	85	36	82	52	53	258	258
40 Seaford	104	52	52	54	52	13	18	17	25	31	104	104
41 Sturgeon Falls	356	179	177	184	52	196	76	37	29	14	356	356
42 Sudbury	240	113	127	172	72	54	70	45	18	35	240	240
43 Thorold	113	45	68	90	80	28	15	17	31	22	113	113
44 Trenton	160	74	86	142	88	21	25	37	46	31	160	160
45 Vankleekhill	285	132	153	153	54	56	73	52	53	51	285	285
46 Walkerton	180	77	103	142	79	34	20	40	44	42	180	180
47 Wallaceburg	169	88	81	89	52	75	15	28	15	36	169	169
48 Waterloo	135	61	74	94	70	24	19	40	36	16	135	135
49 Whitby	45	23	22	32	71	3	6	11	9	16	45	45
Totals	11,803	5,800	6,003	7,748	66	3,313	1,905	2,389	2,175	1,926	95	11,803
Totals.												
* Counties, etc	17,867	9,052	8,815	9,773	54	6,626	2,995	3,307	2,623	2,050	266	17,867
2 Cities	17,447	8,984	8,463	12,017	69	4,939	2,382	3,628	3,330	2,214	454	17,447
3 Towns	11,803	5,800	6,003	7,748	66	3,313	1,905	2,389	2,175	1,926	95	11,803
4 Grand tot's, 1903	47,117	23,836	23,281	29,538	62.69	14,878	7,782	9,324	8,128	6,190	815	47,117
6 Grand tot's, 1902	46,964	23,314	22,650	28,817	62.69	14,544	7,956	8,709	7,906	6,093	756	46,964
6 Increases	1,153	522	631	721	.....	334	.....	615	222	97	59	1,153
7 Decreases .....	.....	.....	.....	.....	.....	.....	174	.....	.....	.....	.....	.....
8 Percentages .....	.....	50.59	49.41	62.69	.....	31.58	16.51	19.8	17.25	13.13	1.73	100

*In incorporated villages included with Counties, etc., there were 2,663 pupils, with an average daily attendance of

SEPARATE SCHOOLS.—*Concluded.*various branches of instruction, Maps, etc.—*Concluded.*

	Drawing.	Geography.	Music.	Grammar and Composition.	English History.	Canadian History.	Temperance and Hygiene.	Drill and Calisthenics.	Bookkeeping.	Algebra.	Geometry.	Botany.	Elementary Physics.	Agriculture.	Number of maps.	Number of schools giving prizes.	Number of trees planted on Arbor Day.
1	458	278	458	278	133	133	133	458							10	2	29
2	144	79	144	79	30	30	30	30							13	1	
3	253	253	253	185	47	91	47	253	15	35	35		35		16	1	
4	404	234	404	234	75	75	75	329							20		
5	156	156	156	156	43	70	43	156							14		
6	477	346	477	346	76	212	346	477							29		
7	405	313	405	280	74	167	167	405							20		
8	225	142	225	164	56	78	56	225							10		
9	930	577	930	577	101	218	218	930							25	3	
10	132	58	132	58	35	35	35	132							18		
11	196	109	196	109	28	53	53	196							6	1	
12	74	60	74	60	14	20	14	74							7	1	2
13	63	63	63	37	14	30	37	63							18		
14	827	440	827	553	44	398	44	827	45	24	24				12	1	
15	69	69	69	69	15	25	25	44							3	1	
16	376	256	376	256	120	211	120	376	37	37	37	37			8		
17	278	207	278	207	51	66	40	278	11	11	11	2	6	8	15		
18	58	32	58	32	14	14	14	58							12		
19	157	99	157	99	28	28	28	157							4	1	
20	296	136	296	136	55	87	41	296							11		
21	45	45	45	16	16	11	33	45							3		
22	231	189	231	100	52	100	100	231							6	1	
23	90	76	90	76	20	32	32	90							10		
24	116	73	116	73	56	56	56	116							8		
25	65	49	65	49	20	37	37	65							15		
26	51	38	51	38	13	23	13	51							10	1	
27	574	425	574	425	82	187	251	574							28		
28	249	187	249	151	55	121	121	249							10	1	
29	779	441	779	584	116	274	274	779							27	2	6
30	226	159	226	159	49	119	89	226							10		
31	199	152	199	152	64	103	64	199							10		
32	89	58	89	58	7	31	31	89							17	1	
33	219	219	219	103	28	103	219	219							10		
34	276	187	276	187	29	82	82	276							27		
35	74	39	74	48	27	27	27	74							10		
36	187	108	187	88	18	40	108	187							9		
37	222	175	222	92	39	92	39	222							17	1	
38	258	137	258	173	105	105	258	258							10		
39	104	72	104	72	31	56	31	104							10		
40	356	84	356	170	18	47	18	356							11	1	
41	240	240	240	240	43	61	61	240	4	4	4				8		
42	113	70	113	70	22	33	70	113							18		
43	160	160	160	77	31	77	114	160							12		
44	285	285	285	255	50	104	51	285							22	1	13
45	180	180	180	180	42	86	180	180							8		
46	169	94	169	94	36	51	51	169							10	1	
47	135	92	135	52	16	52	16	135							8	1	
48	36	25	36	36	16	25	16	36							8	1	
49																	
	11,759	8,004	9,925	7,906	2,165	4,190	3,748	10,566	120	119	119	2	78	82	582	24	50
1	15,221	9,534	5,970	8,433	2,624	4,732	4,555	9,177	359	253	249	55	197	1,004	1,582	117	353
2	16,678	12,674	16,349	12,270	3,280	6,577	12,256	15,963	814	398	393	116	129	44	849	50	68
3	11,759	8,004	9,925	7,906	2,165	4,190	3,748	10,566	120	119	119	2	78	82	582	24	50
4	43,658	30,212	32,243	28,609	8,069	15,499	20,559	35,706	1,298	770	766	173	404	1,130	3,013	191	471
5	41,952	29,788	31,559	27,409	7,544	15,035	14,687	34,459	1,026	727	714	66	333	2,076	2,976	173	449
6	1,706	424	683	1,200	525	464	5,872	1,247	267	43	52	107	71		37	18	22
7															946		
8	92.66	64.12	68.43	60.72	17.12	32.89	43.63	75.78	2.74	1.63	1.62	36	85	2.39			

COLLEGIATE INSTITUTES

I.—Table H.—

Collegiate Institutes.	Receipts.						
	Legislative grants.	Municipal grants (county).	Municipal grants (local).	School fees.	Balances and other sources.	Total receipts.	Teachers' salaries.
	\$ c.	\$ e.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
1 Aylmer	906 35	1,465 34	1,650 00	1,008 60	363 91	5,393 60	3,668 00
2 Barrie	a 1,148 58	1,148 58	1,300 00	1,649 00	2,244 43	7,490 59	5,720 64
3 Brantford	a 1,329 45	.....	7,900 00	2,476 90	1,023 97	12,730 32	9,000 00
4 Brockville	1,163 36	1,243 50	6,300 00	1,199 61	1,103 38	11,009 85	6,933 36
5 Chatham	a 1,319 46	.....	6,554 00	1,633 95	1,360 45	10,867 86	8,050 00
6 Clinton	963 31	1,508 45	1,700 00	902 00	81 00	5,254 76	4,441 75
7 Cobourg	ab 1,713 70	2,083 50	2,460 56	1,040 00	447 18	7,744 24	5,160 00
8 Collingwood	a 981 40	1,118 00	3,100 00	1,140 30	654 95	6,994 85	4,510 00
9 Galt	a 1,276 00	1,865 19	4,000 00	1,947 00	442 55	9,530 76	7,193 32
10 Goderich	a 1,102 12	1,300 25	2,600 00	1,260 00	2,862 57	9,124 94	5,343 66
11 Guelph	a 1,198 97	.....	5,805 24	1,215 80	476 57	8,696 38	6,490 00
12 Hamilton	ao 5,906 93	.....	12,959 97	4,205 75	244 00	23,316 65	17,162 75
13 Ingersoll	1,013 28	1,495 80	2,400 00	616 25	402 12	5,927 45	4,860 00
14 Kingston	b 2,563 18	.....	6,400 00	4,556 96	854 10	14,390 24	11,362 68
15 Lindsay	a 1,241 62	2,159 78	3,714 10	1,467 25	543 74	9,124 89	6,712 37
16 London	b 1,555 60	1,200 00	23,043 79	3,877 00	712 89	30,399 29	21,722 50
17 Morrisburg	a 1,098 45	3,396 33	2,240 77	.....	3,479 44	10,214 99	5,082 96
18 Napanee	a 1,129 46	2,700 00	2,890 00	101 00	2,014 13	8,744 59	5,279 26
19 Niagara Falls	a 1,167 26	1,387 20	4,700 00	135 55	648 94	8,038 95	5,830 00
20 Orillia	a 1,129 42	1,129 42	2,600 00	1,413 95	1,637 17	7,839 96	6,380 00
21 Ottawa	1,336 32	.....	16,010 00	10,109 50	5,418 51	32,874 33	18,205 00
22 Owen Sound	a 1,278 17	2,468 20	5,972 00	2,335 00	2,101 63	14,155 10	9,515 00
23 Perth	955 51	1,248 30	3,594 86	333 00	210 31	6,341 98	4,504 00
24 Peterborough	a 1,313 47	7,500 00	.....	2,526 75	99 00	11,435 22	8,103 20
25 Renfrew	b 1,259 76	1,522 27	2,450 00	36 75	2,195 13	7,374 51	5,010 23
26 Ridgeway	a 1,043 96	2,099 44	2,430 00	1,025 00	2,417 58	8,982 98	4,415 80
27 St. Catharines	a 1,269 97	8,687 34	6,903 37	65 00	278 63	12,204 31	7,895 98
28 St. Marys	951 74	973 66	2,475 00	974 65	329 11	5,704 16	4,476 75
29 St. Thomas	a 1,332 51	1,635 81	7,877 50	1,798 00	164 90	12,809 12	9,355 68
30 Sarnia	1,137 28	2,127 04	7,200 00	77 25	.....	10,541 57	6,966 00
31 Seaforth	a 1,018 21	1,856 66	1,900 00	1,314 65	1,735 21	7,825 03	4,632 09
32 Stratford	b 2,163 20	1,300 00	6,000 00	3,643 95	1,736 17	14,842 32	9,081 54
33 Strathroy	a 1,020 01	2,035 77	1,900 00	1,083 00	161 75	6,200 53	5,080 00
34 Toronto (Harbord)	a 1,393 15	.....	22,960 67	5,875 00	4,007 17	34,235 99	20,684 00
35 Toronto (Jameson)	a 1,371 63	.....	17,950 67	3,350 00	269 64	22,952 01	16,260 00
36 Toronto (Jarvis)	a 1,379 55	.....	17,960 66	5,559 75	353 67	25,253 63	17,642 13
37 Toronto Junction	a 1,023 93	789 91	4,520 00	1,752 00	339 89	8,416 73	5,820 00
38 Vankleek Hill	a 879 16	2,115 16	800 00	.....	854 90	4,543 22	3,571 61
39 Whitby	892 78	1,386 90	2,254 00	419 00	214 82	5,167 50	4,216 90
40 Windsor	1,273 92	.....	12,200 00	33 00	1,606 79	15,113 71	7,450 91
41 Woodstock	ab 2,336 05	1,572 71	4,150 00	1,838 12	272 72	10,169 60	7,300 00
Totals	56,545 45	59,621 21	251,717 16	76,025 84	46,156 54	490,066 60	330,073 08

a Grant (\$50) for Cadet Corps included.

b Grant for Technical Education included.

AND HIGH SCHOOLS.

Financial Statement.

Expenditure.						Charges per Year.
Buildings, sites and all permanent improvements.	Repairs to school accommodations.	Library, scientific apparatus, maps, etc., drawing models or equipment for physical education.	School books, stationery, prices, fuel, examinations and other expenses.	Total expenditure.	Balances.	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
1 64 21	47 45	.....	1,613 94	5,393 60	.....	10.00; Res. Form I., 5.00.
2	272 65	.....	1,327 95	7,321 25	169 34	10.00.
3	113 58	.....	2,854 02	11,967 60	762 72	Res. 10.00; Non-res., 16.00.
4	550 00	6 00	2,007 56	9,496 92	1,512 93	F. I., 5.00; F's II., III., IV., 10.00; Co., 5.00.
5 853 45	.....	197 14	1,767 27	10,867 86	.....	City, 6.00; Co., 10.00; Form I., City free.
6	13 50	22 00	777 51	5,254 76	.....	6.00; 8.00; 10.00.
7 121 56	743 93	75 23	1,686 83	7,044 02	700 92	12.00.
8 1,097 00	16 89	33 84	218 64	6,603 41	391 44	Town, 7.50; others, 10.00.
9	30 02	129 77	1,563 86	8,893 84	636 92	Co., 10.00; others, 14.00.
10	120 35	136 92	1,026 35	6,536 89	2,588 05	Res., 5.00, 7.00, 10.00; Co., 6.00, 8.00, 10.00; non-res., 8.00, 10.00, 12.00.
11	492 50	102 47	1,539 71	8,252 53	444 05	City, free; Co., 10.00; others, 20.00.
12	161 03	82 35	5,661 40	23,316 65	.....	Res., F. I., 2.50; other F's, 10.00; non-res., 20.00.
13	189 20	657 89	821 41	5,924 79	2 66	7.50.
14	106 78	105 40	1,490 57	13,700 34	679 90	5.00 to 33.00.
15 749 77	548 60	372 59	1,450 37	9,124 89	.....	7.50; 10.00.
16	53 56	78 48	7,401 54	30,045 23	354 05	Res., free 1st year; others, 10.00; Co., 10.00; other Co., 30.00.
17	113 94	69 33	918 13	6,133 23	4,081 76	Free.
18 112 00	373 80	24 64	1,229 34	6,803 81	1,940 73	Co., free; others, 10.00.
19 271 59	235 31	307 08	1,538 14	8,038 16	79	Free.
20 186 05	890 18	.....	1,328 58	7,130 14	709 72	Town, 5.00; others, 10.00.
21 9,069 38	.....	.....	4,402 69	32,874 33	.....	Res., 20.00, 25.00; non-res., 45.00, 60.00.
22 67 15	684 95	.....	1,593 63	11,860 73	2,294 37	Res., 8.00-12.00; Co., 10.00; non-res., 12.00-15.00.
23 350 10	36 24	45 74	1,177 25	6,113 33	228 63	Co., 5.00; non-res., 16.00.
24 1,100 00	.....	.....	1,880 38	11,083 58	351 64	F. I., 5.00; other F's, 10.00; non-res., 25.00.
25 305 58	425 87	352 44	1,166 58	7,260 47	114 04	Res., free; non-res., 15.00.
26 61 98	.....	3 75	4,015 66	8,495 79	487 19	Town, F's II., III., IV., 6.00; others, 10.00.
27 298 53	842 37	.....	3,153 60	12,190 48	13 83	Res., free; non-res., 16.00.
28 218 00	25 30	79 11	906 30	5,696 46	7 70	Town, 5.00; others, 10.00.
29 460 71	99 17	67 93	2,825 63	12,809 12	.....	City, F's I. & II., free; III. & IV., 10.00; Co., 10.00; others, 30.00.
30 205 25	.....	200 16	2,627 94	9,999 95	541 62	Free.
31 8 00	86 15	51 24	892 68	5,670 16	2,154 87	F. I., 6.00; II., 8.00; III. & IV., 10.00.
32 237 23	.....	76 49	4,627 89	14,023 25	819 07	10.00.
33	1,639 45	123 44	1,050 40	6,130 40	70 13	F. I., town, free; others, 10.00.
34 5,000 00	165 71	210 01	6,578 57	34,085 46	.....	F. I., free; others, 13.00 to 32.00.
35	344 34	236 42	6,532 75	23,168 47	.....	F. I., free; others, 7.00 to 32.00.
36 .....	.....	.....	6,964 81	25,187 00	.....	F. I., free; others, 7.00 to 32.00; 6.00 extra to non-res.
37 883 63	.....	252 29	1,427 90	8,383 82	32 91	10.00; 15.00.
38 15 00	375 11	72 30	606 14	4,640 72	.....	Free.
39 167 66	72 97	.....	622 25	5,078 88	88 62	H. S. D., 6.00; Co., 7.50; others, 10.00.
40 5,367 50	368 96	63 54	1,862 70	15,113 71	.....	Free.
41 590 90	45 93	55 10	2,177 67	10,169 60	.....	City and Co., 7.50; others, 10.00
27,851 72	10,345 89	4,232 19	95,317 05	467,885 93	22,180 67	9 free; 32 fee.

c Grant (\$4,500) for Normal College included.

COLLEGIATE INSTITUTES

I.—Table H.—

High Schools.	Receipts.													
	Legislative grants.		Municipal grants (county).		Municipal grants (local).		School fees.		Balances and other sources.		Total receipts.		Teachers' salaries.	
	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.
1 Alexandria	651	78	734	74	1,330	00			1,903	02	4,619	54	2,610	00
2 Almonte	716	40	716	40	2,336	87	173	75	552	29	4,495	71	3,235	25
3 Arnprior	610	20	610	20	1,800	00	129	00	1,761	56	4,910	96	2,450	00
4 Arthur	a 667	22	911	81	850	00	726	50	183	30	3,338	83	2,207	00
5 Athens	688	84	2,408	84	1,350	00	352	00	494	68	5,294	36	3,134	70
6 Aurora	610	13	700	00	650	00	693	00	496	00	3,149	13	2,170	83
7 Beamsville	484	60	530	00	700	00	9	00	240	71	1,964	31	1,215	00
8 Belleville	828	79	345	00	4,221	66	208	50			5,603	95	4,525	00
9 Berlin	b 1,730	18	1,967	88	10,528	81	1,524	00	433	34	16,184	21	6,025	60
10 Bowmanville	797	18	797	18	2,295	00	459	70	858	82	5,207	85	3,667	85
11 Bradford	582	48	886	51	600	00	656	50	60	36	2,785	85	1,780	31
12 Brampton	838	81	1,768	81	2,100	00	1,179	00	69	78	5,956	40	4,710	00
13 Brighton	480	31	797	76	500	00	131	60	503	26	2,412	93	1,750	01
14 Caledonia	674	23	1,424	23	811	00	79	00	673	61	3,562	07	2,135	39
15 Campbellford	662	14	910	14	1,906	04	631	50	106	50	4,216	32	3,077	60
16 Carleton Place	666	55	666	55	2,700	00	139	50	699	15	4,871	78	3,330	00
17 Cayuga	576	01	1,891	88	650	00			336	15	3,454	08	2,145	59
18 Colborne	464	06	484	28	1,230	08	124	75	1,364	21	3,667	38	1,560	90
19 Cornwall	853	13	4,114	26	3,547	97	64	00	682	60	9,261	90	4,750	00
20 Deseronto	639	40			2,700	00	164	25	342	49	3,846	14	2,571	84
21 Dundas	a 697	58	1,047	58	558	41	566	50	599	74	3,468	81	2,489	40
22 Dunnville	a 692	54	1,926	79	800	00	36	00	908	75	4,364	08	2,935	33
23 Dutton	587	43	1,461	28	700	00	601	00	544	18	3,893	89	2,568	49
24 East Toronto					1,500	00	169	00			1,669	00	701	00
25 Elora	b 546	92	759	00	800	00	517	50	189	26	2,812	68	2,179	50
26 Essex	1,158	91	1,967	50	2,000	00	73	70	89	79	5,289	90	3,010	00
27 Fergus	583	18	583	18	1,890	00	407	50	999	51	4,373	37	2,225	00
28 Forest	600	79	1,321	48	500	00	400	00	726	21	3,548	48	2,200	00
29 Fort William	943	64			2,324	45			188	95	3,457	04	1,943	40
30 Gananoque	674	30	924	30	1,921	98	124	50	24	00	3,669	08	2,506	94
31 Georgetown	599	14	599	14	1,228	01	687	75			3,114	04	2,300	00
32 Glenora	609	64	642	91	800	00	613	50	85	96	2,752	01	1,971	00
33 Gravenhurst	972	40			1,200	00	362	00	32	47	2,566	82	1,643	50
34 Grimsby	439	97	559	40	2,015	78			994	28	4,009	43	1,300	00
35 Hagersville	616	72	616	72	790	08			1,649	25	3,672	77	2,319	90
36 Harrison	625	38	625	38	1,300	00	872	25	4,720	59	8,143	60	2,890	41
37 Hawkesbury	604	27	1,604	27					1,185	76	3,394	29	2,150	00
38 Iroquois	728	84	2,396	05	1,200	00			737	33	5,062	82	3,100	00
39 Kemptville	724	98	1,687	06	672	07	1,427	85	89	00	4,600	96	3,707	75
40 Kincardine	759	31	1,430	59	1,142	37	1,057	00	811	27	5,200	54	3,347	31
41 Leamington	685	90	1,335	32	1,450	00	61	00	2,735	71	6,268	00	3,485	00
42 Listowel	660	90	800	00	800	00	927	50	285	12	3,473	52	2,676	00
43 Lucan	685	52	938	75	900	00	1,098	00	124	04	3,746	37	2,574	50
44 Madoc	573	50	1,580	47	700	00	581	00	188	03	3,623	00	2,149	05
45 Markham	a 731	76	1,530	00	400	00	1,297	00	683	14	4,641	90	3,300	00
46 Meaford	800	83	1,705	18	2,225	00	750	50	156	45	5,637	95	3,489	90
47 Mitchell	a 647	80	799	20	1,200	00	500	00	230	00	3,377	90	2,424	00
48 Mount Forest	759	91	1,233	05	1,400	00	755	25	296	00	4,444	20	3,048	00
49 Newburgh	552	25	1,655	27	485	40			347	70	3,040	71	2,220	00
50 Newcastle	473	59	473	59	1,000	00	139	00	782	50	2,868	61	1,250	00
51 Newmarket	659	65	782	00	800	00	840	00	442	60	3,524	76	2,380	76
52 Niagara	433	06	490	00	550	00			242	50	1,715	56	1,250	00
53 Niagara Falls S.	578	52	578	52	1,087	55			976	64	3,821	23	2,135	00
54 North Bay	849	76			1,840	00	4	50	59	57	2,753	83	2,176	80
55 Norwood	a 648	57	655	38	2,755	25	610	00	151	25	4,820	45	2,200	00

AND HIGH SCHOOLS.—Continued.

Financial Statement.—Continued.

Expenditure.					Charges per Year.	
Buildings, sites and all permanent improvements.	Repairs to school accommodations.	Library, scientific apparatus, maps, etc., drawing models or equipment for physical education.	School books, stationery, prizes, fuel, examinations and other expenses.	Total expenditure.	Balances.	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
1 129 40		76 50	1,123 71	3,939 61	679 93	Free.
2 300 00			677 93	4,113 18	382 53	Res., 1.00; Co., 6.00; others, 11.00.
3 500 00	49 60		575 13	3,574 73	1,336 23	Res., free; non-res., 10.00
4 152 00	180 16	221 22	578 45	3,338 83		10.00.
5 410 10	37 50	16 71	561 79	4,160 80	1,133 56	Res., free; Co., 5.00; others, 10.00.
6	97 92	33 71	356 69	2,659 15	489 98	10.00.
7	50		439 26	1,654 76	309 55	Free.
8			1,078 96	5,603 95		Res., free; others, 25.00
9 7,119 86	702 59	318 69	2,017 47	16,184 21		10.00.
10 201 00	26 50		880 29	4,775 64	432 24	F. I., 4.00; F. II., 6.00; F. III. & IV., 7.50.
11			646 24	2,426 55	359 30	F. I., free; others, 10.00.
12	42 65	108 53	746 50	5,607 68	348 72	10.00.
13	20 73	30 24	360 68	2,161 69	251 24	Res., free; Co., 7.50.
14 31 69	277 56		734 60	3,179 24	382 83	Free; other Cos., 4.50.
15 181 02		60 50	897 20	4,216 32		Res., 6.00; Co. and non-res., 7.50.
16	238 71	50 00	665 85	4,184 56	687 22	Res., free; Co., 5.00; non-res., 10.00.
17	249 71		496 66	2,891 96	562 12	Free.
18 132 90	21 20	56 76	300 28	2,071 14	1,596 24	Free; non-res. and Co., 7.50.
19		315 00	1,154 40	6,219 40	3,042 56	Free.
20	305 82	11 40	795 57	3,684 63	161 51	Res., free; others, 10.00.
21	87 98	53 57	619 82	3,250 77	218 04	Town, 9.50; Co., 10.00.
22 139 35	128 03	381 54	780 11	4,364 08		Town and Co., free; others, 10.00.
23 189 76	101 50	130 68	118 33	3,108 76	785 13	10.00.
24 472 90	61 25	249 44	102 83	1,587 32	81 68	Res., 10.00; non-res., 20.00.
25 138 70	29 89	28 34	421 77	2,798 22	14 46	Res., 5.00; non-res. and Co., 10.00.
26	680 84	28 80	1,105 87	4,825 51	464 39	Co. free; others, 10.00.
27 49 22	16 89	11 13	1,368 21	3,670 45	702 92	10.00.
28		196 70	284 36	2,681 06	867 42	10.00.
29 471 80	5 00	95 22	941 92	3,457 04		Free.
30 1 40	178 15	99 04	883 55	3,669 08		Free to res.; Co. & non-res., 5.00.
31 2 50	7 25	52 29	752 00	3,114 04		F. I., 7.00; others, 10.00.
32	148 56		632 45	2,752 91		10.00.
33 25 62		51 11	670 88	2,391 11	175 71	10.00.
34 1,710 15	15 44		138 96	3,164 55	844 88	Free.
35	34 15	10 10	1,308 62	3,672 77		Free.
36 2,127 84	13 65	300 25	582 95	5,915 10	2,228 50	10.00.
37			534 71	2,684 71	709 58	Free.
38		63 20	1,327 60	4,490 80	572 02	Free.
39	136 47	20 65	736 09	4,600 96		Res., free; Co., 5.00; non-res., 65 per cent. of cost.
40	330 82	93 70	794 91	4,566 74	633 80	H. S. Dist., 8.00; others, 10.00.
41 16 20	14 17	23 94	2,356 83	5,896 14	371 86	Co., free; non-res., 10.00.
42	10 40	55 00	680 19	3,420 59	52 93	F. I., 7.00; others, 10.00.
43		24 16	1,097 51	3,696 17	50 20	10.00.
44 24 51			1,241 58	3,415 14	207 86	H. S. Dist., 7.00; Co., 10.00.
45	180 42	63 11	680 61	4,224 14	417 76	10.00.
46			2,032 14	5,522 04	115 92	Town, 8.00; others, 10.00.
47	76 01		511 12	3,011 13	366 85	Res., 6.00; non-res., 10.00.
48	80 21	161 42	1,105 37	4,395 09	49 20	F. I., free to res.
49 84 04		42 22	443 57	2,789 84	250 87	Free.
50 74 50	57 25	25 00	405 83	1,812 58	1,056 10	7.50.
51 28 72	38 60	98 34	705 17	3,251 58	272 67	10.00.
52	106 96		288 96	1,645 92	69 64	Free.
53	45 64	51 90	632 60	2,865 22	356 01	Free.
54			577 03	2,753 83		Free.
5	1,025 34		1,385 11	4,610 45	210 00	6.00.

COLLEGIATE INSTITUTES

I.—Table H.—

High Schools.		Receipts.					
		Legislative grants.	Municipal grants (county).	Municipal grants (local).	School fees.	Balances and other sources.	Teachers' salaries.
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
56 Oakville		492 70	1,260 87	914 53	303 06	35 54	3,006 64
57 Omeme		458 84	458 84	566 35	154 00		1,758 03
58 Orangeville		842 95	1,050 00	1,800 05	1,405 75		5,098 75
59 Oshawa		764 52	764 52	3,888 00	968 91	653 92	7,039 87
60 Paris		633 14	633 14	2,500 00	249 60	539 05	4,254 93
61 Parkhill		582 36	582 36	725 00	842 10	395 25	3,127 07
62 Pembroke		740 41	740 41	3,522 96		4 70	5,008 48
63 Petrolia		724 40	1,730 95	2,600 00		2,572 04	7,627 39
64 Picton		854 16	2,500 00	3,000 00	6 00	705 11	7,065 27
65 Port Arthur		1,133 72		2,707 16		39 25	3,880 13
66 Port Dover		455 84	455 84	889 12		46 43	1,847 20
67 Port Elgin		580 78	756 00	1,100 00	509 75	43 63	2,990 16
68 Port Hope		849 78	849 78	1,420 46	1,237 75	1,574 53	5,932 30
69 Port Perry	a	717 52	1,044 20	1,335 86	436 25	98 42	3,632 25
70 Port Rowan		429 79	575 56	623 17			1,628 32
71 Prescott		608 92	406 73	2,021 46	63 50	66 49	3,166 04
72 Rat Portage		1,004 60		1,490 31		370 00	2,864 91
73 Richmond Hill		482 40	808 14	250 00	570 00	270 47	2,381 01
74 Sault Ste. Marie		990 48		1,950 00	666 50	692 59	4,299 57
75 Simcoe		601 39	2,089 15	1,812 05	4 00	46 00	4,752 59
76 Smith's Falls		684 90		2,928 91	271 00	70 75	3,955 56
77 Smithville		512 54	685 00	512 64	31 75	1,125 32	2,867 21
78 Stirling		482 30	188 09	1,900 30	362 00	100 00	2,832 39
79 Streetsville		455 98	955 98	250 00	165 00	700 45	2,527 41
80 Sydenham		547 71	1,600 00		483 20	711 98	3,342 89
81 Thorold		587 59	587 59	1,700 00		307 75	3,182 93
82 Tillsonburg		643 11	643 11	1,500 00	248 00	420 35	3,454 57
83 Trenton		629 52	211 03	2,562 04	314 56	364 99	4,082 14
84 Uxbridge	a	678 97	1,049 80	1,095 00	507 60	55 90	3,387 27
85 Vienna		443 98	443 98	500 00		874 07	2,262 03
86 Walkerton		735 42	1,201 63	1,500 00	691 00	1 040 34	5,158 39
87 Wardsville		443 48	442 48	395 00	181 00	250 09	1,718 05
88 Watford		511 89	911 89	450 00	243 00	232 41	2,349 19
89 Watford		611 01	1,290 95	600 00		840 12	3,342 08
90 Watford		667 55	1,660 25		454 00	2,222 94	5,004 74
91 Welland		679 68	1,705 21	2,000 00		696 22	5,081 11
92 Weston		509 22	700 00	520 00	426 00	175 40	2,330 62
93 Wiarton		609 10	691 35	1,350 00	392 85	89 39	3,132 69
94 Williamstown		614 76	614 76	2,994 50		6,054 33	10,278 45
1 Totals, High Schools		62,227 37	89,666 82	141,248 33	35,002 42	58,525 77	386,670 76
2 do Collegiate Insts.		56,545 45	59,621 21	251,717 56	76,025 84	46,156 54	490,966 60
3 Grand totals 1903		118,772 82	149,288 03	392,965 94	111,028 26	104,682 31	877,637 36
4 do do 1902		112,650 00	130,124 69	384,401 05	105,801 01	99,876 28	839,853 03
5 Increases		6,122 82	19,163 34	8,564 89	5,227 25	4,806 03	43,884 33
6 Decreases							
7 Percentages		13.55	17.03	44.82	12.66	11.34	70.04

Cost per pupil, \$31.72.

AND HIGH SCHOOLS.—Continued.

Financial Statement.—Concluded.

Expenditure.						Charges per year.
Buildings, sites and permanent improvements.	Repairs to school accommodations.	Library, scientific apparatus, maps, etc., drawing models or equipment for physical education.	School books, stationery, prizes, fuel, examinations and other expenses.	Total expenditure.	Balances.	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
56.....	212 96	129 72	623 97	3,006 64	.....	5.00; 8.00.
57.....	2 40	6 82	327 13	1,758 03	.....	Free. H. S. Dist.; others, 10.00.
58.....	162 25	44 63	761 61	4,903 49	195 26	H. S. Dist., 9.00; others, 10.00.
59 1,479 62	114 68	143 10	885 87	7,039 87	.....	7.50.
60.....	142 41	59 00	1,079 19	3,880 60	374 33	Free; Co. and non-res., 10.00.
61.....	71 21	6 25	420 53	2,610 74	516 33	6.00; 8.00; 10.00.
62 21 25	28 25	32 84	1,410 89	5,008 48	.....	Free.
63 603 50	36 14	2 00	516 32	4,900 22	2,727 17	Free.
64.....	.....	.....	1,439 13	5,955 81	1,109 46	Free; non-res., 10.00.
65.....	467 30	.....	873 32	3,874 13	6 00	Free.
66 159 35	.....	64 33	223 52	1,847 20	.....	Free.
67 25 20	.....	27 84	381 25	2,804 29	185 87	Res., 6.50; others, 10.00.
68 350 00	.....	66 80	1,057 49	5,932 30	.....	Co., 7.50; town and others, 9.00.
69 369 69	36 38	66 52	379 26	3,551 85	80 40	7.50.
70.....	151 07	6 35	158 95	1,628 32	.....	Free.
71.....	65 75	58 16	796 63	3,112 20	53 84	Res., free; non-res., 5.00.
72.....	30 00	164 96	669 95	2,864 91	.....	Free.
73 39 10	48 26	.....	413 53	2,199 69	181 32	10.00.
74 540 00	.....	251 72	830 00	4,286 72	12 87	10.00.
75 8 25	3 50	162 65	778 19	4,752 59	.....	Free to Co.; non-res., 10.00.
76.....	85 10	.....	480 46	3,955 56	.....	Res., free; Co., 5.00; others, 10.00.
77.....	5 25	69 97	316 01	2,121 23	745 98	Free; Commercial, 5.00; F. IV., 10.00.
78.....	.....	64 33	615 25	2,479 63	352 76	Non-res., 10.00.
79 2 00	24 48	5 90	290 82	1,756 95	770 46	5.00.
80 149 95	485 97	97 14	228 62	3 81 68	161 21	Res., 5.00; non-res., 6.00.
81 305 85	11 69	.....	485 30	2,782 84	400 09	Free.
82 378 40	14 50	23 38	724 58	3,422 86	31 71	Town, 1st year, free; 6.00.
83 67 20	228 90	75 26	732 58	3,879 14	203 00	Res., free; 10.00.
84.....	.....	.....	400 21	3,091 53	295 74	Res., 5.00; non-res., 7.50.
85 243 27	.....	67 25	233 80	1,744 32	517 71	Free.
86 364 42	.....	.....	605 57	4,769 99	388 40	10.00.
87.....	25 79	23 81	411 91	1,661 51	51 54	Res., 7.50; Co., 10.00; others, 15.00.
88 53 00	57 00	.....	224 81	2,134 81	214 38	5.00.
89.....	94 34	1 75	463 35	2,693 89	648 19	Free.
90.....	22 88	.....	938 88	3,750 16	1,254 58	Res. and other Cos., 10.00; Co. free.
91.....	27 25	.....	640 88	3,718 13	1,362 98	Free.
92 235 76	45 96	21 89	300 40	2,289 00	41 62	10.00.
93 248 50	35 26	68 24	445 29	3,113 34	19 35	Town, 6.00; others, 10.00.
94 503 08	20 32	75 26	5,832 67	9,008 52	1,269 93	Free.
1 20,861 87	8,621 26	5,598 12	71,635 33	348,196 14	38,474 62	45 free; 49 fee.
2 27,861 72	10,345 89	4,282 19	95,317 05	467,885 93	22,180 67	9 free; 32 fee.
3 48,723 59	18,967 15	9,880 31	166,952 38	816,082 07	60,655 29	54 free; 81 fee.
4 44,246 43	11,428 41	9,566 46	157,036 56	769,679 71	63,173 32	52 free; 82 fee.
5 4,477 16	7,538 74	313 80	9,915 82	46,402 36	.....	2 free.
6.....	.....	.....	.....	.....	2,518 03	1 fee.
7 5.97	2.32	1.21	20.46	.....	.....	40 per cent free; 60 per cent fee.

a Grant (\$50.00) for Cadet Corps included.

COLLEGIATE INSTITUTES AND

II.—Table I.—Attendance, Pupils in the various

Collegiate Institutes.	Pupils and attendance.				Number of pupils in the various						
	Boys.	Girls.	Total.	Average attendance.	Reading.	English Grammar and Rhetoric.	English Composition.	Poetical Literature.	Supplementary Reading in English Literature.	Canadian History.	English History.
1 Aylmer	86	94	180	103	123	165	180	180	180	128	173
2 Barrie	130	124	254	154	160	206	244	238	254	131	127
3 Brantford	167	236	403	238	295	202	399	399	399	159	189
4 Brockville	150	152	302	175	177	230	290	290	290	187	217
5 Chatham	185	241	426	241	426	409	426	426	426	197	197
6 Clinton	91	88	179	110	69	179	179	179	88	69	69
7 Cobourg	74	83	156	91	99	144	156	156	156	99	103
8 Collingwood	89	128	217	127	137	198	217	168	217	123	154
9 Galt	127	134	261	148	226	249	261	259	259	165	259
10 Goderich	111	151	262	166	175	235	250	250	250	104	75
11 Guelph	115	161	276	166	104	176	276	150	276	104	104
12 Hamilton	338	450	788	448	310	628	767	760	760	313	541
13 Ingersoll	68	76	144	78	113	124	140	140	140	103	113
14 Kingston	272	307	579	335	362	466	536	536	536	301	287
15 Lindsay	118	129	247	137	159	222	247	247	247	159	212
16 London	463	484	967	563	599	859	937	937	937	599	733
17 Morrisburg	140	120	260	154	130	240	260	260	260	155	155
18 Napanee	131	146	279	172	229	240	272	272	272	167	171
19 Niagara Falls	95	143	238	134	162	203	238	238	238	162	187
20 Orillia	127	174	301	184	147	285	297	300	250	161	179
21 Ottawa	249	261	510	372	496	519	610	610	610	270	352
22 Owen Sound	233	231	464	280	275	378	464	464	464	254	304
23 Perth	100	111	211	141	171	199	208	209	209	168	173
24 Peterborough	162	165	317	216	250	300	315	315	315	229	250
25 Renfrew	105	155	260	155	160	242	260	260	260	203	211
26 Ridgeway	102	110	212	114	157	194	212	212	212	157	177
27 St. Catharines	136	200	336	185	251	309	336	332	332	313	332
28 St. Marys	102	131	233	143	108	230	230	233	233	130	166
29 St. Thomas	207	261	468	296	319	446	468	468	468	319	319
30 Sarnia	149	158	307	189	220	295	307	307	307	186	211
31 Seaforth	111	117	228	134	118	192	192	192	118	118	133
32 Stratford	174	207	381	223	226	343	377	378	378	374	374
33 Strathroy	86	116	202	129	195	193	200	198	200	150	158
34 Toronto (Harbord)	288	311	599	368	251	459	597	597	597	347	237
35 Toronto (Jameson)	189	218	407	247	332	391	407	407	384	154	402
36 Toronto (Jarvis)	296	314	610	277	450	530	600	604	595	151	489
37 Toronto Junction	133	132	265	150	162	252	262	262	262	152	201
38 Vankleekhill	92	123	225	125	141	215	225	225	225	49	102
39 Whitby	67	87	154	99	113	164	154	154	154	113	159
40 Windsor	149	201	350	200	242	175	332	131	131	106	106
41 Woodstock	120	180	300	185	270	270	300	300	300	216	260
Totals	6,437	7,421	13,858	8,156	9,104	11,948	13,637	13,233	13,189	7,845	9,366

HIGH SCHOOLS.—Continued.

subjects and Examination Results.

branches of instruction.

Ancient History.	Geography.	Arithmetic and Mensuration.	Algebra.	Geometry.	Trigonometry.	Physics.	Chemistry.	Botany.	Zoology.	Latin.	Greek.	French.	German.	Writing.
1	75	128	168	170	143	16	128	59	129	1	168			
2	137	141	210	244	185	21	172	114	80	157	3	104	23	128
3	152	195	354	396	217	20	281	60	131	141	15	136	25	88
4	125	225	230	275	275	30	119	80	50	244	10	205	64	195
5	133	177	409	310	369	14	186	87	62	273	35	233	34	117
6	91	99	160	179	177	19	110	34	77	137	18	135	35	116
7	45	99	144	168	156	12	117	57	39	104		112	27	60
8	116	123	198	203	148	12	131	97	7	145		156	27	99
9	62	120	247	220	174	12	97	55	7	156		149	30	104
10	93	56	246	240	135	16	125	30	90	138		202	63	56
11	375	313	566	759	464	18	615	208	24	184	13	435	241	246
12	40	103	135	144	98	10	55	26	150	78		99	5	88
13	83	302	504	445	427	21	228	113	83	359	8	416	142	128
14	135	109	222	190	138	25	105	79	73	152	8	127	23	109
15	302	599	859	758	394	73	779	264	217	694	19	455	58	403
16	141	119	240	250	203	28	190	60	60	220	12	175	25	119
17	68	192	245	229	139	21	106	81	80	199		217	25	53
18	76	162	203	238	112	20	108	59	137	165	4	122	14	107
19	130	152	236	249	197	30	183	90	96	287	3	204	56	132
20	103	496	522	610	403	43	193	81	41	383	29	415	81	207
21	275	378	409	398	53	220	128	227	12	345	15	324	15	142
22	50	166	199	208	139	10	79	25	56	177	16	130	17	72
23	78	264	300	312	141	15	80	51	174	3	171	5	185	20
24	100	160	242	203	153	8	133	32	60	181	6	193	25	107
25	81	167	200	133	111	20	111	70	28	127	5	54	16	131
26	332	251	309	336	137	19	107	55	149	9	193	8	201	92
27	123	166	201	227	227	26	150	28	84	205	6	161	38	85
28	149	256	446	358	315	22	257	102	176	243		159	35	153
29	105	186	285	305	148	16	139	38	152	156	15	132	19	186
30	58	125	195	186	101	15	105	48	90	175	4	125	21	122
31	147	120	343	310	243	38	220	112	88	287	5	128	95	129
32	68	190	190	185	160	8	190	45	65	175	3	150	18	75
33	178	343	503	595	472	69	235	92	232	443	49	549	189	222
34	92	312	384	401	312	16	284	61	224	6	302	19	306	80
35	196	366	526	594	376	72	415	127	300	25	500	31	549	135
36	94	191	248	260	111	17	125	37	4	153	6	120	38	159
37	84	96	215	225	175	10	124	46	49	205	1	175		49
38	64	90	144	154	154	12	60	20	92	141	4	100	12	84
39	62	164	314	191	137	12	108	54	79	184		131	42	172
40	82	120	270	300	210	14	140	40	55	196	11	178	53	95

4,881 8,030 12,225 12,363 8,915 1,022 7,339 3,022 4,415 229 9,536 400 8,445 2,070 5,712

COLLEGIATE INSTITUTES AND

II.—Table I.—Attendance, Pupils in the various

Collegiate Institute.	Number of pupils in the various branches of instruction.—Continued.							EXAMINA-	
	Bookkeeping and Commercial Transactions.	Stenography.	Typewriting.	Drawing.	Drill, Calisthenics and Gymnastics.	Agriculture.	Manual Training.	Number passed District Certificate Exam.	Number passed Junior Leaving Pt. II Exam.
1 Aylmer	128				128	162			
2 Barrie	82	64	64		85	231			
3 Brantford	189	108	53		220	345	185		
4 Brockville	117	33	33		117				
5 Chatham	236	116	116		120	400			
6 Clinton	85	36	31		85	154			
7 Cobourg	99	66	72		39	153	75		
8 Collingwood	104	49	49		139	209			
9 Galt	156	75	63		110	244			
10 Goderich	121	64	9		124	220			
11 Guelph	126	78	71		66	275			
12 Hamilton	255	80	25		245	680	608		
13 Ingersoll	88	34	16		82	187			
14 Kingston	203	104	107		67		114		
15 Lindsay	109	24	24		109	240		1	
16 London	403	140	55		378	940	332		
17 Morrisburg	75	50	25		119	232	57		
18 Napanee	160	82	50		153	277			
19 Niagara Falls	158	77	46		82	213			
20 Orillia	138	52	74		84	237		1	
21 Ottawa	370	67			370	571			
22 Owen Sound	220	37	35		215	302			
23 Perth	82				145	200			
24 Peterborough	190	57	7		187	300			
25 Renfrew	97	62	47		60	101	31	9	
26 Ridgeway	101	59	56		42	200			
27 St. Catharines	199	119	32		142	333			
28 St. Marys	102	34	7		84	218			
29 St. Thomas	153	110	55		98	446			
30 Sarnia	186	109	55		152	290			
31 Sarnia	180	25	28		116	220			
32 Stratford	166	80	53		173		249		
33 Strathroy	75	40	28		75	190			
34 Toronto (Harbord)	380	136	68		344	549			
35 Toronto (Jameson)	196	97	22		198	342			
36 Toronto (Jarvis)	165	102	70		365	565			
37 Toronto Junction	159	46	62		159				
38 Vankleeckhill	59	28	28		49	210	43		
39 Whitby	84	68	12		90	140			
40 Windsor	168	90	98		207	330			
41 Woodstock	112	52	46		120	240	82		
Totals	6,432	2,738	1,792		5,933	11,106	100	1,676	11 516

HIGH SCHOOLS.—Continued.

subjects and Examination Results.—Concluded.

TION RESULTS.

	Number of Honors obtained by such pupils.	Number passed Commercial Diploma Exam, Pts. I and II.	Number passed Commercial Diploma Exam, Pt. II.	Number passed Senior Leaving Pt. I Exam.	Number of Honors obtained by such pupils.	Number passed Senior Leaving Pt. II Exam.	Number of Honors obtained by such pupils.	Number passed the full Departmental Matriculation Exam.	Number passed the Junior Matriculation Exam, held by any University.	Number of first-class Junior Matriculation Honors taken by Matriculation candidates.	Number of second-class Junior Matriculation Honors taken by Matriculation candidates.	Number passed the Senior Matriculation Examination held by any University.	Number passed the Entrance Examination other than the Departmental, for any profession.
1					6								
2					10								
3					8								
4					5								
5					2								
6					4								
7					4								
8					3								
9					3								
10					5								
11					4								
12					1								
13					3								
14					1								
15					3								
16					2								
17					5								
18					7								
19					5								
20					8								
21					3								
22					9								
23					1								
24					3								
25					1								
26					8								
27					1								
28					11								
29					4								
30					3								
31					12								
32					8								
33					1								
34					3								
35					1								
36					5								
37					5								
38					1								
39					4								
40					2								
41					2								
	8	9	129	227	10	139	3	403	80	194	189	26	65

COLLEGIATE INSTITUTES AND

II.—Table I.—Attendance, Pupils in the various

High Schools.	Pupils and attendance.				Number of pupils in the			
	Boys.	Girls.	Total.	Average attendance.	Reading.	English, Grammar and Rhetoric.	English Composition.	Practical Literature.
1 Alexandria	70	71	141	84	141	141	141	141
2 Almonte	62	67	119	70	95	108	117	114
3 Arden	52	86	138	78	138	138	138	138
4 Arthur	59	60	119	72	79	116	119	119
5 Athens	69	110	179	118	128	172	177	177
6 Aurora	55	58	111	66	111	104	111	111
7 Beaverville	36	38	74	39	68	74	74	74
8 Belleville	120	150	270	149	265	270	265	265
9 Berlin	103	113	216	125	161	210	210	210
10 Bowmanville	56	68	124	77	99	113	123	123
11 Bradford	66	60	126	71	91	123	126	126
12 Brantford	98	80	178	118	118	143	178	178
13 Brantford	35	39	74	42	48	74	74	74
14 Cambridge	51	62	113	76	64	106	113	113
15 Cambridge	69	82	152	88	89	148	162	152
16 Carleton Place	74	93	167	101	126	158	165	166
17 Cayuga	46	46	92	52	64	87	87	87
18 Cayuga	35	32	67	38	43	67	67	67
19 Cornwall	123	140	263	161	263	263	263	263
20 Deseronto	44	71	115	72	86	115	115	115
21 Deseronto	60	69	129	80	139	128	139	139
22 Deseronto	72	69	141	79	99	138	141	141
23 Deseronto	101	102	203	127	94	190	190	190
24 Deseronto	24	18	42	36	32	42	42	42
25 Elora	44	50	94	60	68	86	94	94
26 Elora	67	81	138	83	98	124	135	135
27 Fergus	61	78	139	72	74	117	139	139
28 Forest	61	71	132	85	85	119	125	125
29 Fort William	23	43	66	34	53	65	65	65
30 Georgetown	66	86	142	86	90	136	142	142
31 Georgetown	58	71	129	68	89	122	129	129
32 Glenora	55	43	98	57	62	95	96	97
33 Glenora	35	46	81	36	51	81	81	81
34 Glenora	19	42	61	35	47	61	61	61
35 Glenora	54	60	104	62	71	98	104	104
36 Glenora	81	65	146	81	69	126	146	146
37 Huronville	34	41	75	49	48	61	74	75
38 Ingersoll	78	79	157	102	119	144	157	154
39 Ingersoll	108	126	232	163	164	220	232	232
40 Ingersoll	76	96	172	103	134	167	172	172
41 Ingersoll	77	76	153	83	88	133	150	150
42 Ingersoll	81	71	152	95	117	149	152	152
43 Ingersoll	67	78	145	93	145	131	145	145
44 Ingersoll	40	54	94	63	46	94	94	94
45 Ingersoll	127	81	208	120	108	160	191	191
46 Ingersoll	72	78	150	90	81	124	146	146
47 Ingersoll	66	77	143	91	109	143	143	143
48 Ingersoll	95	84	179	108	126	169	179	179
49 Ingersoll	76	68	144	82	144	142	144	144
50 Ingersoll	20	31	51	37	22	45	51	51
51 Ingersoll	60	82	142	80	93	136	142	142
52 Ingersoll	18	29	47	22	29	44	44	45
53 Ingersoll	35	45	80	38	66	78	78	78
54 Ingersoll	35	63	88	52	62	80	88	88
55 Ingersoll	67	68	135	77	135	130	130	130

HIGH SCHOOLS.—Continued.

subjects and Examination Results.—Continued.

various branches of instruction.

	Supplementary Reading in English Literature.	Canadian History.	English History.	Ancient History.	Geography.	Arithmetic and Mensuration.	Algebra.	Geometry.	Trigonometry.	Physics.	Chemistry.
1	141	121	121	31	121	141	141	66		66	66
2	114	95	95	31	95	110	118	54		51	20
3	138	97	97	37	97	134	134	134		78	41
4	119	79	83	40	79	116	119	119		71	40
5	177	64	64	136	64	172	179	170		138	107
6	111	75	75	43	68	104	104	75		75	30
7	74	69	69	9	69	74	74	36		37	9
8	265	198	200	72	114	210	255	142		135	106
9	120	120	176	61	161	204	210	170		116	38
10	213	99	109	24	99	107	122	69		60	16
11	126	91	96	47	59	123	126	92		80	26
12	178	143	143	39	118	143	170	127		80	39
13	74	48	48	26	48	74	74	51		49	26
14	64	64	69	49	64	104	113	79		75	28
15	100	105	110	46	105	148	146	79		78	64
16	126	28	103	34	98	158	165	115		66	9
17	87	64	64	23	64	83	83	38		41	14
18	43	43	43	24	28	67	67	43		43	24
19	221	192	70	65	191	250	201	128		122	14
20	86	86	89	47	86	115	114	68		64	18
21	139	111	111	41	111	139	139	73		73	26
22	141	99	131	39	99	138	139	139		66	18
23	169	94	102	85	94	169	203	163		203	163
24	42	32	32	10	21	42	42	42		21	10
25	94	24	71	36	68	90	94	73		94	35
26	97	96	96	52	94	124	137	81		13	10
27	139	74	74	65	74	117	139	139		100	39
28	58	73	78	53	78	122	129	104		100	39
29	40	53	54	11	53	63	65	65		18	9
30	142	90	90	52	90	140	141	90		72	47
31	129	89	95	46	66	122	128	85		85	42
32	97	61	68	42	61	91	96	95		58	31
33	81	55	55	30	51	81	75	44		32	32
34	61	47	47	14	47	61	61	37		37	3
35	104	71	75	35	71	98	104	160		35	23
36	146	63	88	78	68	120	145	144		146	40
37	48	62	63	26	51	65	74	39		37	15
38	154	110	110	47	110	144	155	92		92	38
39	220	154	173	103	154	220	232	182		182	70
40	172	90	83	65	90	167	134	134		114	28
41	150	88	98	62	76	133	150	100		82	50
42	152	117	117	71	117	149	152	162		65	55
43	145	95	114	45	66	130	145	145		113	78
44	69	46	74	46	46	94	94	46		136	16
45	191	163	180	82	108	178	208	191		138	82
46	143	82	82	44	81	126	144	144		101	32
47	179	109	109	53	107	143	143	143		94	42
48	179	126	179	74	126	159	179	179		112	61
49	144	59	59	66	76	144	144	144		12	30
50	22	22	22	30	22	45	47	47		19	5
51	142	93	113	47	57	140	135	82		76	42
52	31	15	29	20	29	45	45	19		22	4
53	78	66	66	19	66	78	78	78		45	20
54	88	62	62	26	62	80	85	85		88	26
55	130	80	80	55	133	130	130	100		93	36

COLLEGIATE INSTITUTES AND

II.—Table I.—Attendance, pupils in the various

		Number of pupils in the various branches of instruction.											
High Schools.		Botany.	Zoology.	Latin.	Greek.	French.	German.	Writing.	Bookkeeping and Commercial Transactions.	Stenography.	Typewriting.	Drawing.	Vocal Music.
1	Alexandria	110		136		136		110	110			110	
2	Almonte	66		89	4	68	2	71	71	32	19	64	
3	Arnprior	60		125	1	60		60	60			60	
4	Arthur	48		119		30	1	48	75			75	
5	Athens	64		176	3	102		114	64			127	
6	Aurora	36		90	2	75	8	36	68	40	30	68	
7	Beamsville	50		42		26		50	50			50	
8	Belleville	161	2	163	1	161	18	161	161			150	
9	Berlin	86		93	4	30	130	87	87	37	33	64	
10	Bowmanville	83		113	3	85	8	63	63	32		63	
11	Bradford	59		108		76	3	59	91	59		59	
12	Brampton	90	10	156	12	110	8	82	82	28	30	82	
13	Brighton	23		49		35		23	23			23	
14	Caledonia	34		103		53	8	54	54			54	
15	Campbellford	65		88		37	1	103	103	21		103	
16	Carleton Place	100		105	2	85	6	60	48			98	
17	Cayuga	36		62		39	3	64	56	33	24	36	
18	Colborne	24		60		21		24	29			24	
19	Cornwall	73		195	24	208	11	176	120	55	57	123	132
20	Deseronto	60		64	1	37	14	86	86			86	
21	Dundas	83		116	2	105		83	83	20	20	83	
22	Dunnville	51		99		50	8	83	65	31		99	
23	Dutton	46	11	198	3	26		40	41			40	
24	East Toronto	18		38	1	32	6	21	26			21	
25	Elora	68		92		40	10	18	28			48	
26	Essex	93	2	122	7	65	7	91	91			91	
27	Fergus	33		104	1	69	20	33	33			33	
28	Forest	60		128	1	92	25	60	60			60	
29	Fort William	40		60		53	2	40	40	31		36	
30	Gananoque	42		68		76		83	83			83	
31	Georgetown	66		112	1	36	9	66	66			66	
32	Glenora	41		91		64	1	41	41			41	
33	Gravenhurst	51		49		23		51	51	29		51	
34	Grimsby	20		32		30		42	42			41	
35	Hagersville	39		73		46	6	31	39			39	
36	Harriston	40		118	10	50	30	89	45	45	40	60	
37	Hawkesbury	41		59		74	8	43	41			43	
38	Iroquois	127	10	115	1	68	9	89	89	24		89	
39	Kemptville	80	1	202	8	116	12	80	80			80	
40	Kincardine	84		132		122	27	90	83	37	36	85	
41	Leamington	40		112		86		46	67			46	
42	Listowel	74		137	5	42	106	62	62			62	
43	Lucan	42	7	135		14	79	66	66	20	10	66	
44	Madoc	22		80		50	21	22	22			22	
45	Markham	54	4	191	3	145	5	52	52	70	12	70	
46	Menford	43	3	143		82	32	40	61	30	15	40	
47	Mitchell	72		89		72		72	72			70	
48	Mount Forest	110	3	164	3	78	8	106	106			105	
49	Newburgh	78		104		60		78	78	59		78	
50	Newcastle	22		29		30	9	22	22			22	
51	Newmarket	57		105	2	72		57	59	69	42	63	
52	Niagara			42		21	2	29	31	21	28	29	
53	Niagara Falls South	45		54		18	1	45	66	31	18	45	
54	North Bay			73		51	3	62	62	50		40	15
55	Norwood	58		120		80	4	75	70			60	

HIGH SCHOOLS.—Continued.

subjects, and Examination Results.—Continued.

tion.—Con.		EXAMINATION RESULTS.																	
		Drill, Cadethenics and Gymnastics.	Agriculture.	Manual training.	Number passed District Certificate Exam.	Number passed Junior Leaving Pt. II Exam.	Number of Honors obtained by such pupils.	Number passed Commercial Diploma Exam. Pts. I and II.	Number passed Commercial Diploma Exam. Part II.	Number passed Senior Leaving Part I Exam.	Number of Honors obtained by such pupils.	Number passed Senior Leaving Pt. II Exam.	Number of Honors obtained by such pupils.	Number passed the full Department- tal Matriculation Exam.	Number passed the Junior Matricu- lation Exam. held by any Univer- sity.	Number of first-class Junior Matricu- lation Honors taken by Matricu- lation candidates.	Number of second-class Junior Matricu- lation Honors taken by Matricu- lation candidates.	Number passed the Senior Matricu- lation Examination held by any University.	Number passed the Entrance Exam- ination other than the Depart- mental, for any profession.
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			
25																			
26																			
27																			
28																			
29																			
30																			
31																			
32																			
33																			
34																			
35																			
36																			
37																			
38																			
39																			
40																			
41																			
42																			
43																			
44																			
45																			
46																			
47																			
48																			
49																			
50																			

*In Manual Training and Household Science.

COLLEGIATE INSTITUTES AND

II.—Table I.—Attendance, Pupils in the various

High Schools.	Pupils and attendance.				Number of pupils in the			
	Boys.	Girls.	Total.	Average attendance.	Reading.	English Grammar and Rhetoric.	English Composition.	Poetical Literature.
56 Oakville	38	46	84	47	72	84	84	79
57 Omemece	23	29	52	43	38	52	52	52
58 Orangeville	105	112	217	124	117	195	212	214
59 Oshawa	89	85	174	108	121	163	174	174
60 Paris	64	59	123	72	93	105	123	123
61 Parkhill	73	69	142	92	75	125	142	141
62 Pembroke	92	64	156	95	95	141	156	156
63 Petrolia	77	109	186	102	142	179	179	179
64 Picton	104	122	226	139	179	216	225	225
65 Port Arthur	25	47	72	43	72	72	72	72
66 Port Dover	38	41	79	48	45	79	79	79
67 Port Elgin	59	35	94	54	70	88	94	93
68 Port Hope	104	116	220	135	97	200	220	220
69 Port Perry	55	22	77	48	32	92	100	100
70 Port Rowan	26	22	48	24	28	48	48	48
71 Prescott	38	50	88	50	60	81	88	84
72 Rat Portage	45	40	85	48	59	75	85	85
73 Richmond Hill	51	32	83	53	40	65	65	65
74 Sault Ste. Marie	41	127	168	66	101	119	128	128
75 Simcoe	77	80	157	90	66	157	157	157
76 Smith's Falls	57	127	184	118	171	171	184	184
77 Smithville	41	54	95	56	56	91	95	95
78 Stirling	32	37	69	43	33	61	69	69
79 Streetsville	28	26	54	32	39	54	54	24
80 Sydenham	64	89	153	88	96	153	153	153
81 Thorold	20	65	85	65	85	81	85	85
82 Tillsonburg	46	67	113	59	77	104	113	113
83 Trenton	67	70	137	67	90	132	137	137
84 Uxbridge	53	80	133	80	93	120	133	133
85 Vienna	12	24	36	17	36	36	36	36
86 Walkerton	88	77	165	93	91	143	165	160
87 Wardsville	18	24	42	21	34	40	42	42
88 Waterdown	43	45	88	53	88	88	88	88
89 Watford	58	55	113	70	101	108	113	110
90 Watford	80	96	176	113	101	163	172	172
91 Welland	70	132	202	115	92	190	201	201
92 Weston	28	43	71	40	51	53	65	67
93 Wharton	44	54	98	53	57	98	98	98
94 Williamstown	44	52	96	58	49	96	96	96
1 Totals, High Schools	5,551	6,313	11,864	7,161	8,426	11,123	11,738	11,652
2 Totals, Collegiate Institutes	6,437	7,421	13,858	8,156	9,104	11,946	13,637	13,233
3 Grand totals, 1903	11,988	13,734	25,722	15,317	17,530	23,069	25,375	24,885
4 Grand totals, 1902	11,629	12,843	24,472	14,430	16,541	21,576	24,241	23,768
5 Increases	359	891	1,250	887	989	1,493	1,134	1,117
6 Decreases								
7 Percentages	46.6	53.4		59.55	68.11	89.64	98.65	96.74

HIGH SCHOOLS.—Continued

subjects, and Examination Results.—Continued.

various branches of instruction.

	Supplementary Reading in English Literature.	Canadian History.	English History.	Ancient History.	Geography.	Arithmetic and Mensuration.	Algebra.	Geometry.	Trigonometry.	Physics.	Chemistry.
56	79	62	62	18	60	84	75	59	.....	50	50
57	52	19	19	33	19	52	52	52	.....	36	36
58	214	97	117	131	76	186	211	205	20	197	84
59	174	121	139	53	121	163	174	163	14	174	37
60	123	99	99	30	62	120	120	120	6	53	20
61	67	75	89	67	75	125	142	110	14	66	25
62	156	130	136	48	71	140	156	120	11	68	52
63	186	98	186	88	98	179	186	142	7	85	16
64	225	160	173	61	193	220	212	174	15	77	36
65	42	64	64	8	72	72	72	50	1	42	8
66	45	45	45	34	45	75	79	50	.....	48	34
67	93	71	71	35	51	93	94	61	.....	61	19
68	220	78	96	100	64	195	151	150	20	104	53
69	100	70	90	50	49	93	90	87	5	46	15
70	.....	28	28	20	28	48	46	20	.....	20	11
71	84	59	59	25	59	85	85	58	2	51	28
72	85	75	75	26	59	85	85	80	.....	75	26
73	65	22	18	25	40	65	65	43	.....	43	18
74	128	63	38	27	101	119	128	65	.....	65	27
75	157	110	110	60	97	127	157	150	11	105	60
76	184	84	184	53	130	181	184	184	13	100	15
77	.....	56	56	39	56	91	95	59	4	56	20
78	69	33	37	28	33	60	68	68	8	52	36
79	54	39	39	19	35	54	54	31	.....	32	23
80	153	96	96	57	96	145	153	153	.....	93	18
81	85	45	59	30	81	81	85	85	4	25	25
82	113	77	77	36	65	104	113	60	.....	52	25
83	137	93	128	41	59	122	135	135	11	49	47
84	133	93	93	40	47	120	130	85	8	34	14
85	36	24	24	12	24	36	36	36	.....	36	11
86	91	37	98	69	91	138	160	111	19	86	39
87	25	34	34	17	34	40	42	38	.....	28	17
88	88	70	70	40	44	84	88	88	4	60	15
89	110	97	100	37	65	106	110	77	9	76	22
90	107	56	64	115	56	163	172	116	8	120	81
91	138	129	140	60	112	190	201	171	14	132	52
92	68	51	51	19	52	67	51	39	3	27	14
93	98	57	57	41	57	93	98	98	5	65	33
94	96	44	36	27	82	96	96	52	.....	52	5
1	10,675	7,394	8,138	4,306	7,260	11,021	11,477	8,958	596	6,901	3,192
2	13,189	7,845	9,356	4,881	8,030	12,225	12,363	8,915	1,022	7,339	3,022
3	23,864	15,239	17,494	9,187	15,290	23,246	23,840	17,873	1,618	14,240	6,214
4	22,932	14,768	16,817	8,791	14,500	21,594	22,953	16,881	1,662	12,758	5,860
5	932	471	677	396	790	1,652	887	992	.....	1,482	354
6	.....	.....	.....	.....	.....	.....	.....	.....	44	.....	.....
7	92.77	59.24	68.01	35.71	59.44	90.37	92.68	69.48	6.29	55.36	24.16

COLLEGIATE INSTITUTES AND

II.—Table I.—Attendance, Pupils in the various

High Schools.	Number of pupils in the various branches of instruction.										
	Botany.	Zoology.	Latin.	Greek.	French.	German.	Writing.	Bookkeeping and Commercial Transactions.	Stenography.	Typewriting.	Drawing.
56 Oakville	40		41		24	2	42	50	14	14	43
57 Omemee			46		19		19	19			19
58 Orangeville	86	4	152	11	125	43	82	82			82
59 Oshawa	111	2	118	6	73	28	121	121	35	60	121
60 Paris	60	1	78	1	40	10	62	79	29	13	61
61 Parkhill	83	1	135	3	65	3	60	60	25		60
62 Pembroke	74		125	1	96		74	74			74
63 Petrolia	98	4	158		94		98	98	98	20	98
64 Picton	58		164		161	27	91	82	46	24	82
65 Port Arthur	64		67	1	67		28	64			64
66 Port Dover	29		78	3	19	7	29	29			29
67 Port Elgin	51		84	4	37	12	51	51			51
68 Port Hope	67		184	11	124	73	67	121	91	88	67
69 Port Perry	21		65	5	64	25	72	72	66	45	72
70 Port Rowan	28		13		15		28	28	20		28
71 Prescott	24		60		38		31	51	42	34	31
72 Rat Portage	59		65		60		59	59			59
73 Richmond Hill	22		53	2	43		22	40		8	40
74 Sault Ste Marie	63		116		118		63	100	10		63
75 Simcoe	40		70	3	60	20	60	60	25		60
76 Smith's Falls	131		170	3	141	5	131	131	23	25	131
77 Smithville	46		79		24	7	56	40	15		36
78 Stirling	20	4	33		26		33	16			33
79 Streetville	35		54		31	2	23	35			35
80 Sydenham	96		141		143	14	53	73			73
81 Thorold	25		65	8	35	2	50	50	50	50	50
82 Tillsonburg	53		53		49		53	53			53
83 Trenton	73		114	1	66	22	88	88			88
84 Unbridge	47		78	6	78	30	47	47	26		47
85 Vienna	15		34		4	1	24	24	8		24
86 Walkerton	41		130	9	58	60	54	54			54
87 Wardsville	14		38	1	8	1	25	25			25
88 Waterdown	23		80	4	78	20	23	23			23
89 Waterford	65		103	4	52	12	65	65			65
90 Watford	56		165		91	13	56	56	65	41	56
91 Welland	48		193	5	162	27	33	69			57
92 Weston	38		44	1	25	9	89	39	16	31	39
93 Wiarton	33		48	1	12	3	51	33			33
94 Williamstown	43		91	4	72	2	43	43			43
1 Totals, High Schools..	5,027	69	9,295	202	6,077	1,159	5,584	5,832	1,609	802	5,686
2 Totals, Col. Institutes	4,415	229	9,536	400	8,445	2,070	6,712	6,432	2,738	1,792	5,933
3 Grand totals, 1903 ...	9,442	298	18,831	602	14,522	3,229	11,296	12,264	4,347	2,594	11,619
4 Grand totals, 1902 ...	9,051	365	18,884	631	13,595	3,280	10,059	11,384	3,727	2,044	10,721
5 Increases	391				927		1,237	930	820	610	898
6 Decreases		67	53	29		51					
7 Percentages	36.71	1.16	73.21	2.34	56.46	12.65	43.91	47.68	16.9	10.31	46.17

COLLEGIATE INSTITUTES AND

III.—Table K.—Miscellaneous

Collegiate Institutes.	Brick, stone, or frame school house.	Number of acres in playground.	Schools under United Board.	EQUIPMENT.							Religious and other Exercises.				
				Value of Library. (Not including Supplementary Reading in English Literature.)	Value of Supplementary Reading in English Literature.	Value of Scientific Apparatus.	Value of Charts, Maps, and Globes.	Value of Models for Drawing.	Value of Gymnasium. (Not including Equipment.)	Value of Appliances for Physical Education.	Value of Museum of Natural History, etc.	Schools using authorized Scripture Readings.	Schools opened with prayer.	Schools closed with prayer.	Schools using the Bible.
1 Aylmer	B.	4	1	614	19	697	140	38	880	85	300	1	1	1	1
2 Barrie	B.	11	1	818	48	726	136	5	1,730	90	128	1	1	1	1
3 Brantford	B.	11	1	818	48	891	108	27	1,000	128	299	1	1	1	1
4 Brockville	B.	11	1	748	1	1,049	189	10	600	184	50	1	1	1	1
5 Chatham	B.	11	1	883	123	817	128	6	765	68	25	1	1	1	1
6 Clinton	B.	11	1	641	36	723	128	8	1,200	35	110	1	1	1	1
7 Cobourg	B.	11	1	818	24	581	96	8	1,200	231	27	1	1	1	1
8 Collingwood	B.	8	1	1,103	24	1,147	67	9	1,200	231	27	1	1	1	1
9 Galt	B.	4	1	636	24	858	7	10	2,000	200	50	1	1	1	1
10 Goderich	B.	4	1	944	31	855	164	12	2,600	577	50	1	1	1	1
11 Guelph	B.	4	1	1,012	80	1,480	164	15	811	909	50	1	1	1	1
12 Hamilton	B. & S.	2	1	599	148	804	121	4	811	231	100	1	1	1	1
13 Ingersoll	B.	2	1	700	107	679	75	25	600	126	46	1	1	1	1
14 Kingston	B.	2	1	1,180	107	1,096	95	10	600	348	700	1	1	1	1
15 Lindsay	B.	2	1	879	32	2,809	173	46	980	188	200	1	1	1	1
16 London	B.	3	1	557	74	1,265	167	17	800	251	10	1	1	1	1
17 Morrisburg	B.	3	1	776	78	931	126	17	800	251	10	1	1	1	1
18 Napanee	B.	1	1	657	29	622	87	17	1,063	118	100	1	1	1	1
19 Niagara Falls	B.	6	1	579	90	768	110	68	1,800	278	100	1	1	1	1
20 Orillia	B.	2	1	1,260	68	1,518	281	150	2,040	184	50	1	1	1	1
21 Ottawa	S.	1	1	1,329	33	1,798	122	20	600	267	500	1	1	1	1
22 Owen Sound	H.	1	1	729	155	821	155	10	600	160	10	1	1	1	1
23 Perth	B.	4	1	813	10	886	149	25	600	160	10	1	1	1	1
24 Peterborough	B.	2	1	435	10	581	70	12	900	90	20	1	1	1	1
25 Renfrew	B.	3	1	605	10	1,094	143	47	700	76	20	1	1	1	1
26 Ridgeway	B.	1	1	631	52	815	133	18	700	84	10	1	1	1	1
27 St. Catharines	B.	2	1	654	56	662	120	25	983	374	168	1	1	1	1
28 St. Marys	B.	2	1	815	195	916	110	18	1,320	168	66	1	1	1	1
29 St. Thomas	B.	2	1	720	192	716	127	12	600	112	102	1	1	1	1
30 Sarnia	B.	2	1	762	11	753	138	26	380	710	236	1	1	1	1
31 Seaforth	B.	2	1	961	4	1,154	219	28	4,000	790	209	1	1	1	1
32 Stratford	H.	8	1	730	195	905	114	28	8,257	218	80	1	1	1	1
33 Stratroy	H.	1	1	986	11	2,099	173	32	2,000	236	300	1	1	1	1
34 Toronto (Harb'd)	B.	1	1	1,440	77	2,293	155	15	850	209	300	1	1	1	1
35 Toronto (Jame's)	B.	1	1	1,336	11	1,210	201	39	2,000	200	80	1	1	1	1
36 Toronto (Jarvis)	B.	1	1	743	4	879	107	32	2,000	236	300	1	1	1	1
37 Toronto (Junction)	B.	3	1	623	4	726	46	3	850	209	300	1	1	1	1
38 Vankleekhill	B.	2	1	631	4	546	115	10	2,000	200	80	1	1	1	1
39 Whitby	B.	1	1	874	77	974	140	35	2,000	174	80	1	1	1	1
40 Windsor	B.	1	1	986	77	1,560	161	15	2,000	174	80	1	1	1	1
41 Woodstock	B.	1	1	986	77	1,560	161	15	2,000	174	80	1	1	1	1
Totals		99	16	32,940	1,994	43,049	5,414	881	51,679	8,650	2,608	20	39	9	12

*Gymnasium is part of the main building.

†116 pupils in commercial form.

‡59 pupils in commercial.

HIGH SCHOOLS.—Continued.

information.

Number of pupils in				Number of pupils from		Destination of pupils.							Occupation of parents of each pupil.				
Form I.	Form II.	Form III.	Form IV.	Municipalities composing the High School District.	Municipalities within the County.	Other Counties, etc.	Number who entered Mercantile life.	Number who became occupied with Agriculture.	Number who entered the professions of Law, Medicine and the Church.	Number who became teachers.	Number who entered any other profession.	Number who left for other occupations.	Commerce.	Agriculture.	Mechanical Occupations.	Professions.	Without occupation.
1 46	61	57	16	73	107	...	7	11	...	4	2	18	24	112	27	16	1
2 73	56	102	23	138	108	8	14	3	...	23	5	16	69	86	49	33	17
3 141	112	113	37	307	92	4	40	10	4	8	6	16	106	98	160	39	...
4 118	59	87	38	228	72	19	15	4	5	11	12	27	80	68	112	27	15
5 120	119	110	17	278	147	1	40	10	6	12	23	25	164	129	91	42	...
6 69	37	64	19	91	85	3	9	6	1	9	2	13	33	65	44	21	16
7 39	60	45	12	80	76	...	25	10	10	20	...	34	34	40	70	10	2
8 59	50	93	15	139	51	27	13	3	2	16	5	16	78	73	46	16	4
9 78	96	75	12	153	85	23	24	4	5	2	3	30	66	56	112	20	7
10 104	53	84	21	174	84	4	17	3	5	18	8	22	51	89	86	31	5
11 126	48	72	30	214	49	13	19	3	15	15	6	23	105	61	75	23	22
12 244	169	247	128	644	88	56	80	35	12	45	5	43	282	99	226	90	91
13 46	57	31	10	73	54	17	8	3	1	6	7	17	32	58	47	7	...
14 369	88	105	17	502	70	7	37	8	9	10	7	88	211	62	221	82	3
15 57	52	115	23	147	32	18	18	11	17	16	...	21	66	86	55	19	21
16 363	236	265	103	768	177	22	121	8	14	22	7	172	330	158	298	81	100
17 57	62	113	28	99	153	8	12	8	1	15	2	15	43	120	62	34	11
18 117	84	51	27	148	118	13	17	23	4	11	5	13	71	119	46	30	13
19 82	80	61	25	146	76	16	2	8	1	7	6	29	78	58	57	19	26
20 44	117	103	37	172	69	60	18	14	3	23	3	44	96	73	69	49	14
21 370	126	81	33	514	75	21	37	13	22	9	12	53	257	81	98	127	47
22 142	133	126	63	264	144	56	12	11	14	49	4	40	149	120	113	40	42
23 119	34	44	14	142	64	5	11	4	2	9	3	17	46	57	67	30	11
24 171	58	66	22	252	60	5	25	12	6	12	5	30	102	40	117	30	28
25 60	100	92	8	130	122	8	17	4	5	21	6	18	81	73	75	11	20
26 42	389	61	20	95	113	4	10	10	5	11	...	16	33	90	24	12	53
27 142	109	62	23	212	118	6	40	13	6	11	10	13	102	69	92	17	66
28 63	45	97	28	123	50	60	18	13	8	13	...	10	67	103	48	17	8
29 98	221	127	21	345	121	2	71	23	9	8	5	9	184	121	130	17	16
30 101	133	52	29	96	115	17	15	4	3	12	2	49	88	53	83	36	41
31 86	54	59	29	112	77	7	4	7	12	20	...	25	25	140	46	11	17
32 112	153	115	40	258	97	26	46	9	13	1	...	33	153	95	27	25	...
33 63	90	40	9	112	88	3	10	20	5	14	5	107	156	48	101	26	...
34 221	201	127	50	596	3	...	59	...	3	6	4	107	269	1	149	104	76
35 181	128	26	396	3	...	...	65	...	3	5	4	107	269	1	149	104	76
36 248	182	140	40	548	38	24	60	9	20	21	27	26	292	2	103	108	80
37 152	49	45	19	132	44	89	16	9	2	14	2	31	90	54	69	28	24
38 49	92	74	10	125	26	6	7	11	1	11	1	20	24	113	48	33	...
39 90	22	27	14	91	79	...	9	11	...	3	...	22	37	55	36	20	9
40 120	161	56	13	271	79	...	40	12	4	8	...	43	113	59	142	27	12
41 95	121	65	19	177	117	6	30	7	6	12	...	36	74	96	92	27	...

5,078 4,018 3,601 1,161 9,624 3,560 674 1,111 385 235 575 192 1,305 4,419 3,255 3,723 1,456 1,095

COLLEGIATE INSTITUTES AND

III.—Table K.—Miscellaneous

High Schools.	Brick, stone or frame school house.	EQUIPMENT.														Religious and other Exercises.	
		Number of acres in playground.	Schools under United Board	Value of Library (Not including Supplementary Reading in English Literature.)	Value of Supplementary Reading in English Literature	Value of Scientific Apparatus.	Value of Charts, Maps, and Globes.	Value of Models for Drawing.	Value of Gymnasium. (Not including Equipment.)	Value of Appliances for Physical Education.	Value of Museum of Natural History, etc.	Schools using authorized Scripture Readings.	Schools opened with prayer.	Schools closed with prayer.	Schools using the Bible		
1 Alexandria ...	B.	1	1	318	72	445	85						1		1		
2 Almonte	B.	1	1	325	72	448	78	12					1		1		
3 Arnprior ...	B.	1	1	309	20	361	87			38			1	1	1		
4 Arthur	B.	1	1	272	36	581	38	31		6			1		1		
5 Athens	S.	2	2	485	75	447	69	10		4		1	1		1		
6 Aurora	B.	2	2	327	80	459	69	8					1		1		
7 Beamsville ..	B.	1	1	809		287	70						1		1		
8 Belleville ..	B.	1	1	289	49	534	168	21					1	1	1		
9 Berlin	B.	2	2	426	17	1,360	115	20		22		1	1		1		
10 Bowmanville .	B.	2	2	554	35	497	60	8		2		1	1		1		
11 Bradford	B.	3	3	290	19	328	49	41		32	25	1	1	1	1		
12 Brampton	B.	5	5	400	56	598	67	34		10	50	1	1	1	1		
13 Brighton	B.	1	1	274	28	214	42					1	1	1	1		
14 Caledonia	B.	2	2	424		559	33	14				1	1		1		
15 Campbellford .	B.	1	1	278	33	472	29					1	1		1		
16 Carleton Pl'e.	S.	1	1	485	225	394	65	4		3		1	1		1		
17 Cavuga	B.	1	1	218		346	24		40			1	1		1		
18 Colborne	B.	1	1	259	9	354	87	5				1	1		1		
19 Cornwall	B.	1	1	474		373	141	13				1	1		1		
20 Deseronto	B.	3	3	303	37	394	85	4	300	210	50		1	1	1		
21 Dundas	B.	2	2	496	12	567	109	20		29			1	1	1		
22 Dunnville	B.	1	1	368	17	623	65	23				1	1		1		
23 Dutton	B.	1	1	201	18	534	31					1	1		1		
24 East Toronto .	B.			56		224	25	5				1	1		1		
25 Elora	S.			186	32	361	43	2				1	1		1		
26 Essex	B.	3	3	287	65	472	69	23	700	220		1	1		1		
27 Fergus	S.	1	1	189	14	244	76	9				1	1		1		
28 Forest	B.	2	2	306		470	92	21				1	1		1		
29 Fort William .	B.	1	1	121	56	214	57	3				1	1		1		
30 Gananoque	B.	1	1	488	44	485	108					1	1		1		
31 Georgetown	B.	4	4	230	25	351	71	10		6		1	1		1		
32 Glencoe	B.	2	2	319	49	610	55	28				1	1	1	1		
33 Gravenhurst .	B.	6	6	161	39	385	46					1	1		1		
34 Grimsby	F.	1	1	168	6	296	29	10				1	1		1		
35 Hagersville ..	B.	1	1	316		501	54	28				1	1		1		
36 Harriston	B.	3	3	4		301						1	1		1		
37 Hawkesbury ..	B.	1	1	77		14						1	1		1		
38 Iroquois	B.	2	2	601	6	1,059	137	18		24	250	1	1		1		
39 Kemptville	B.	3	3	309		424	68			18		1	1		1		
40 Kincardine	B.	4	4	479	101	646	92	34		14		1	1	1	1		
41 Leamington ..	B.	1	1	266	57	419	92	32		10		1	1		1		
42 Listowel	B.	2	2	333		404	55		250	41		1	1		1		
43 Lucan	B.	3	3	217	85	601	73	18				1	1		1		
44 Madoc	B.	1	1	165		387	90					1	1		1		
45 Markham	B.	2	2	235	6	785	46	38		13		1	1	1	1		
46 Meaford	B.	3	3	310	9	513	46	7	1,250	239		1	1	1	1		
47 Mitchell	B.	1	1	233		415	64	11	566	225		1	1		1		
48 Mt. Forest	B.	2	2	292	37	548	38			10		1	1		1		
49 Newburgh	S.	1	1	429	35	331	58					1	1		1		
50 Newcastle	B.	2	2	169		309	52	4				1	1		1		
51 Newmarket	B.	1	1	184	38	583	74	23	350	94		1	1	1	1		
52 Niagara	B.	1	1	145		155	72	15				1	1		1		
53 Niagara F. S.	B.	2	2	239	29	344	41	3		80		1	1		1		
54 North Bay	B.	1	1			218						1	1		1		
55 Norwood	B.	3	3	359		290	22			2		1	1		1		

HIGH SCHOOLS.—Continued.

information.—Continued.

Number of pupils in				Number of pupils from			Destination of pupils.					Occupation of Parents of each pupil.					
Form I.	Form II.	Form III.	Form IV.	Municipalities composing the High School District.	Municipalities within the County.	Other Counties, etc.	Number who entered Mercantile life.	Number who became occupied with Agriculture.	Number who entered the professions of Law, Medicine and the Church.	Number who became teachers.	Number who entered any other profession.	Number who left for other occupations.	Commerce.	Agriculture.	Mechanical Occupations.	Professions.	Without occupations.
1	75	35	31	125	7	9							10	39	39	3	
2	38	43	36	83	31	6	7						34	37	40	7	1
3	60	37	27	102	18	13	7						38	30	39	1	
4	48	41	26	53	60		5						26	63	14	10	4
5	41	49	86	73	104		1						33	101	35	8	7
6	36	32	36	50	67	4	12						22	53	21	3	
7	36	29	9	39	35		3						15	36	16	5	2
8	128	70	56	234	35		20						157	40	82	41	12
9	61	81	62	115	101		23						77	31	52	44	13
10	63	36	14	73	61		8						28	47	30	6	13
11	43	36	42	48	71	7	8						12	74	28	9	3
12	82	36	39	95	76	7	15						44	77	26	12	19
13	23	25	26	31	43		4						4	27	29	7	6
14	34	30	42	44	53	16							19	67	12	8	
15	66	39	42	105	40	7	7						34	62	33	13	10
16	98	28	34	126	28	13	14						36	39	66	21	6
17	36	28	23	31	61		1						11	55	15	11	
18	24	19	24	44	23		32						10	30	12	5	10
19	131	61	58	146	99	18	9						62	113	45	16	37
20	45	23	43	90	20	5	16						8	33	47	6	1
21	66	29	44	91	48		11						4	36	29	13	7
22	63	36	30	83	43	15	11						6	31	46	8	
23	40	54	75	80	117	6							2	15	40	24	10
24	21	11	10	36	6								8	1	17	3	13
25	20	40	27	55	38	1	3						23	32	10	6	16
26	54	44	27	86	50	2	11						30	62	30	16	
27	33	41	57	67	67	4	7						27	64	15	18	5
28	31	39	53	66	65	1	4						19	78	12	14	9
29	40	13	11	66			3						15	47	27	9	10
30	56	34	52	106	29	14	7						22	47	16	14	
31	43	38	39	49	47	23	7						30	44	26	14	3
32	35	19	37	46	52		4						30	44	14	9	5
33	37	14	30	78		3	1						19	33	36	6	7
34	24	23	14	26	22	13	10						1	33	8	8	
35	44	25	29	44	58	2	6						25	47	24	7	1
36	38	30	54	85	16	45	8						34	46	35	20	11
37	35	13	11	41	31		1						24	20	22	6	3
38	65	41	34	54	79	24	2						25	86	35	10	1
39	59	65	84	66	60	106	3						50	100	50	20	12
40	57	49	57	93	76	3	16						48	77	22	16	9
41	46	42	53	66	74	13	10						22	64	28	10	29
42	41	40	62	83	45	24	2						54	51	27	14	6
43	66	34	31	88	57		2						13	72	19	12	29
44	22	24	48	44	50		4						8	39	15	7	26
45	52	56	77	36	157	15	27						37	102	37	19	13
46	40	41	48	68	76	6	7						32	69	22	21	6
47	49	41	53	68	72	3	6						18	67	41	15	2
48	64	41	61	99	25	65	7						43	63	37	16	20
49	59	19	66	36	194	4	6						20	100	13	5	6
50	20	14	16	17	32	2	6						7	28	4	8	4
51	57	36	47	77	59	6	9						17	65	50	5	5
52	19	14	12	28	19		3						3	20	19	3	2
53	35	23	23	77	3	3	4						13	34	22	8	3
54	39	22	23	80	5	3	4						27	7	31	9	14
55	30	50	55	60	53	22	6						20	77	25	8	5

COLLEGIATE INSTITUTES AND

III.—Table K.—Miscellaneous

		EQUIPMENT.										Religious and other Exercises.					
			Schools under United Board.	Value of Library.	(Not including Supplementary Reading in English Literature.)	Value of Supplementary Reading in English Literature.	Value of Scientific Apparatus.	Value of Charts, Maps, and Globes.	Value of Models for Drawing.	Value of Gymnasium (Not including Equipment.)	Value of Appliances for Physical Education.	Value of Museum of Natural History, etc.	Schools using authorized Scripture Readings.	Schools opened with prayer.	Schools closed with prayer.	Schools using the Bible.	Commencement Exercises.
High Schools.	Left A, stone or frame school house	Number of acres in playground															
50 Oakville	B	1 1/2	1	285	2	268	25	3					1	1		1	1
57 Omamee	B	1 1/2	1	228	9	302	44				3		1	1	1	1	1
58 Orangeville	B	12 1/2		628	8	590	57	26					1	1	1	1	1
59 Oshawa	B	3	1	260		401	98	14				50	1	1		1	1
60 Paris	B	4	1	357	5	553	108	9					1	1	1	1	1
6 Parkhill	B	2	1	290	20	500	100	3			44	50		1	1	1	1
62 Pembroke	B	2 1/2	1	359	19	496	92	15				50		1	1	1	1
63 Petrolia	B	2		392		403	44	5					1	1	1	1	1
64 Picton	B	3		665	26	663	118	45						1	1	1	1
65 Port Arthur	B	3	1	334		309	48					20		1	1	1	1
66 Port Dover	B	1	1	352	11	442	19	20			7		1	1	1	1	1
67 Port Elgin	B	1 1/2		181	59	404	43	30						1	1	1	1
68 Port Hope	B	1 1/2		514	53	600	95	8			10		1	1		1	1
69 Port Perry	B	3 1/2	1	288	8	457	46	8	200		30	10		1	1	1	1
70 Port Rowan	B	2	1	93		229	44	6			8		1	1		1	1
71 Prescott	B	1	1	229	54	367	112				29			1	1	1	1
72 Rat Portage	B	1 1/2	1	140		303	53	5						1	1	1	1
73 Richmond Hill	B	1 1/2	1	171	18	399	54	35			3		1	1	1	1	1
74 St. Ste Marie	B	1		108	4	254	12	18					1	1	1	1	1
75 Simcoe	B	5	1	272	41	688	134	29			29		1	1	1	1	1
76 Smith's Falls	B	1 1/2	1	428	125	495	67	5						1	1	1	1
77 Smithville	B	1 1/2		117		285	40						1	1	1	1	1
78 Sterling	B	1	1	177	15	373	43							1	1	1	1
79 Streetsville	B	1 1/2		179	35	225	71	2				25	1	1		1	1
80 Sydenham	B	1 1/2		254	91	310	31							1	1	1	1
81 Thorold	B	1 1/2		261	8	347	69	4			4		1	1	1	1	1
82 Unionburg	B	1 1/2		235	29	530	84	2			11	150		1	1	1	1
83 Trenton	B	3 1/2	1	484	35	354	76	7					1	1	1	1	1
84 Tuxbridge	B	1 1/2	1	283	65	332	54	4					1	1	1	1	1
85 Vienna	B	4	1	249	54	268	121	10			50		1	1	1	1	1
86 Warkenton	B	1 1/2		333		457	54	3			7		1			1	1
87 W. Rd. S. E.	B	1	1	218	17	230	75	33						1		1	1
88 Waterdown	B	1 1/2	1	201		334	55	15						1	1	1	1
89 Waterford	B	3		321	23	410	64						1	1	1	1	1
90 Watford	B	2		336		405	110	47			20					1	1
91 Welland	B	1		186	31	600	32							1	1	1	1
92 Weston	B	1		274	5	434	105	15						1	1	1	1
93 Warton	B	2		311	15	302	53							1	1	1	1
94 Wilmot	B	3		221	35	343	87	10						1	1	1	1
1 Tot's High Sch		184 15	39	27,539	2,482	40,096	6,146	1,061	3,635	1,566	730	42		91	27	30	42
2 Tot's Col. Ins		99	16	32,940	1,994	43,049	5,414	881	51,679	8,650	2,608	20		39	9	12	29
3 Grd tot's, 1903		283 15	55	60,479	4,476	83,145	11,560	1,942	55,314	10,216	3,338	62		130	26	42	81
4 Grd tot's, 1902		281 69	54	60,066	4,341	81,633	11,530	1,878	56,435	10,215	3,134	60		130	48	42	87
5 In process		46	1	413	135	1,512	30	64			1	204	2				4
6 Tot's									1,121						12	1	
7 Percentages		40.74											46	96	27	31	67

Table L.—PROTESTANT SEPARATE SCHOOLS.

Statistics.	No. 9 Cambridge.	No. 6 North Plantagenet.	No. 1, N. Tilbury.	L'Orignal Village.	Pentecostulshene Town.	Totals.
Number of Schools	3	3	3	3	4	4
<i>Receipts :</i>						
Balances from 1902	\$ c. 6 20	\$ c. 81 48	\$ c. 19 75	\$ c. 277 60	\$ c. 92 91	\$ c. 477 94
Government Grants	4 05	2 45	12 27	20 65	150 43	189 85
Municipal Grants			150 00	548 42	1,972 85	2,671 27
Trustees' school taxes	100 53	350 00	258 86			708 39
Other sources			180 00	8 89	4 50	143 39
Totals	110 78	433 93	565 88	855 26	2,220 69	4,186 04
<i>Expenditure :</i>						
Teachers' salaries	87 50	250 00	300 00	300 25	1,612 46	2,550 21
School sites and buildings		2 33	129 50		258 50	390 33
Libraries, maps, etc	40	98				1 35
Other expenses	16 75	57 99	52 80	35 94	346 20	509 68
Totals	104 65	311 30	482 30	336 19	2,217 16	3,451 60
Balances on hand	6 13	122 68	83 08	519 07	3 53	734 44
<i>Teachers :</i>						
Male					1	1
Female	1	1	1	1	3	7
Certificates	Temp.	II	III	III	4, II	5, II; 2, III;
Salaries	156 00	250 00	300 00	300 00	Male \$675 00 Female \$317 00	1 Temp. Av. Male \$675 00 Av. Female \$279 00
<i>Pupils :</i>						
Total number attending	12	8	36	29	229	314
Boys	6	4	23	13	127	173
Girls	6	4	13	16	102	141
Average attendance	5	3	19	20	144	191
No. in 1st Reader, Part I	4	4	7	7	55	77
" 1st " " II	2		10	3	49	64
" 2nd " "	3	1	6	5	37	52
" 3rd " "	3		11	7	41	62
" 4th " "		3	2	7	38	50
" 5th " "					9	9
" Writing	9	8	36	24	229	306
" Arithmetic	9	8	36	24	229	306
" Drawing	10	8	36	19	229	322
" Geography	8	4	19	16	229	278
" Music		8	36		63	107
" Grammar and Composition	8	4	19	16	229	276
" English History		3	2	6	47	58
" Canadian History	8	4	13	13	88	121
" Physiology and Temperance		4	36	13	47	100
" Drill and Calisthenics		8	36	24	182	250
" Bookkeeping		1			9	10
" Algebra		1			7	8
" Geometry		1			7	8
" Botany						
" Agriculture		1		17		18
School houses (brick, frame or log)	Log	Frame	Frame	Brick	Brick	2B, 2 F, 1L.
Number of maps	7	8	3	12	8	38
Number of globes			1	1		2

Table M.—REPORT ON TRUANCY.

Cities.	No. of children otherwise employed during school hours.	No. of cases of truancy reported to the Truant Officer.	No. of Notices sent by Truant Officer to parent or guardians.	No. of complaints made before Police Magistrates or J.P.'s.	No. of convictions.	No. of children not attending any school.	Towns.	No. of children otherwise employed during school hours.	No. of cases of truancy reported to Truant Officer.	No. of notices sent by Truant Officer to parents or guardians.	No. of complaints made before Police Magistrates or J.P.'s.	No. of convictions.	No. of children not attending any school.
Brantford	50	325	35	12	9	20	Perth	10	2	1	1	1	1
Chatham		12	2				Peterborough	46	15	2	1	1	1
Guelph	8	40	47	2	5		Petrolia	10	15				
Hamilton		167	265	75	23		Port Arthur	6	6				
St. Catharines ..	10	27	67	4	4	12	Prescott		15	2	2		
St. Thomas	11	150	51	13	12		Ridgetown	4	4				
Stratford		53	46	9	9		St. Marys	9	9				
Toronto	119	623	57	16	9		Sarnia	19					
Woodstock			86	3			Seaford	47	12				
Towns.							Smith's Falls	71	71	2	2	71	
Arnprior		4	4				Welland	12	12				
Aylmer		11	11				Warton	5	6			85	
Barrie		17	5				Villages.						
Berlin		4	8				Allen Craig	2					
Bowmanville	6	28	15		28		Ayr	2	6				
Bothwell		2	1				Burk's Falls	3	3			3	
Brockville		41	41	2	1		Campbellford	2	7	5			
Carleton Place ..		20	10			2	Clifford	7		2			
Cobourg		5	6	1	1	8	Colborne			3			
Cornwall		107	2				Delhi	5	4				
Deseronto		150	175			25	Dundalk			3		2	
Dundas	5	32	22	1	1		Elora			3			
Durham		9	3				Exeter	3	2				
Forest	1		1				Fergus	4	4				
Galt		3	3	3	3		Fort Erie	6	6				
Huntsville	3	20	7	3	2		Glencoe	1	1	3			
Ingersoll			2				Hintonburg	12		16			
Kingsville	4	2	3		2		L'Orignal	1	5				
Kincardine		3					Newbury	5	5	1			
Lindsay	7	100	101	1	1	1	Oil Springs	3	6				
Listowel		4					Point Edward	3	3			2	
Mattawa	1	1	1				Port Elgin	3					
Mitchell	2	14	12				Shelburne	1	7	1	1		
Newmarket		8	8				Tara	15	15				
Niagara		37	3				Tweed	5	3				
North Bay	2						Winchester			12			
Owen Sound		2	5		108		Totals	256	2,319	1,381	154	22	320

Table N.—REPORT ON KINDERGARTENS.

Municipality.	No. of Kindergartens.	No. of Teachers.	No. of pupils attending.	Average daily attendance.
Cities :				
Brantford.....	4	9	470	181
Chatham.....	2	6	268	114
Guelph.....	1	2	131	43
Hamilton.....	14	17	1,259	474
Kingston.....	4	4	203	139
London.....	12	30	1,104	384
Ottawa.....	14	24	1,168	465
Stratford.....	3	6	339	108
Toronto.....	46	123	5,080	1,976
Towns :				
Aylmer.....	1	1	114	41
Berlin.....	5	5	253	195
Cobourg.....	1	2	94	37
Dundas.....	1	1	127	41
Galt.....	1	1	87	39
Hespeler.....	1	1	55	31
Ingersoll.....	1	1	89	29
*Listowel.....	1	1	56	35
Owen Sound.....	1	1	134	47
Peterborough.....	2	5	186	62
Pictou.....	1	1	64	30
Preston.....	1	1	94	42
Simcoe.....	1	1	109	33
Tillsonburg.....	1	1	83	31
Toronto Junction.....	2	4	205	84
Waterloo.....	1	1	56	26
*Welland.....	1	1	52	19
Totals.....	123	250	11,880	4,706

* Opened in September, 1903.

Table O.—REPORT ON NIGHT SCHOOLS.

Municipality.	No. of Night Schools.	Teachers.	Pupils attending.	Average daily attendance.
St. Catharines.....	1	1	27	6
Toronto.....	9	16	674	156
Totals.....	10	17	701	162

TABLE P.—GENERAL STATISTICAL ABSTRACT.

A General Statistical Abstract, exhibiting the comparative state and progress of Education in Ontario, as connected with Public, Separate and High Schools (including Collegiate Institutes), also Normal College and Model Schools, from the year 1867 to 1903 compiled from Returns in the Education Department.

Subjects compared.		1867.	1872.	1877.	1882.	1887.	1892.	1897.	1902.	1903.
1	Population .....	.....	1,620,851	.....	1,928,922	.....	2,114,321	.....	2,167,978	.....
2	School population between the ages of five and sixteen years, up to 1884, (and five to twenty-one subsequently)	447,726	496,756	494,804	483,817	611,212	595,238	590,055	584,512	577,383
3	High Schools (including Collegiate Institutes)	102	104	104	104	112	128	130	134	135
4	Normal College and Normal and Model Schools	3	3	4	6	6	6	7	8	8
5	Total Public Schools in operation	4,261	4,490	4,955	5,013	5,277	5,577	5,574	5,671	5,784
6	Total Roman Catholic Separate Schools	161	171	185	190	229	312	340	391	412
7	Grand total of all schools in operation	4,527	4,768	5,248	5,313	5,624	6,023	6,051	6,204	6,289
8	Total pupils attending High Schools (including Collegiate Institutes)	5,696	7,968	9,229	12,348	17,459	22,837	24,390	24,472	25,722
9	Total students and pupils attending Normal College, Normal and Model Schools	800	800	900	1,059	1,204	1,270	1,492	1,709	1,780
10	Total pupils attending Public Schools	382,719	433,256	465,908	445,364	462,839	448,204	441,157	426,094	415,742
11	Total pupils attending Roman Catholic Separate Schools	18,924	21,406	24,952	26,148	30,373	37,466	41,620	45,964	47,117
12	Grand total, students and pupils attending High, Public, Separate Schools, Normal College, and Normal and Model Schools	408,139	403,430	500,989	484,919	511,875	509,777	508,659	492,239	490,361
13	Total amount paid for the salaries of Public and Separate School Teachers	\$1,093,516	1,371,594	2,038,099	2,144,448	2,458,540	2,752,628	2,896,061	3,198,132	3,309,993
14	Total amount paid for the erection and repairs of Public and Separate School houses, and for libraries, apparatus, books, fuel, stationery, etc.	\$379,672	835,770	1,035,390	882,526	1,283,565	1,301,289	1,329,609	1,627,028	1,767,876
15	Grand total paid for Public and Separate School Teachers' salaries, the erection and repairs of School houses, and for libraries, apparatus, etc.	\$1,473,188	2,207,364	3,073,489	3,026,974	3,742,105	4,053,917	4,215,670	4,825,160	5,077,869
16	Total amount paid for High School (and Collegiate Institute) Teachers' salaries	\$94,820	141,812	211,607	253,864	327,452	470,828	532,837	547,402	571,559
17	Total amount paid for erection and repair of High School and (Collegiate Institute) houses, maps, apparatus, prizes, fuel, books, etc.	\$19,190	31,360	51,417	89,857	168,160	215,871	183,139	222,278	255,787
18	Grand total paid for educational purposes as above	\$1,587,198	2,380,536	3,336,513	3,370,695	4,237,717	4,740,616	4,931,646	5,594,840	5,905,215
19	Total Public and Separate School Teachers	4,890	5,476	6,468	6,857	7,594	8,480	9,128	9,631	9,723
20	Total Male Teachers	2,849	2,626	3,020	3,062	2,718	2,770	2,784	2,311	2,176
21	Total Female Teachers	2,041	2,850	3,448	3,795	4,876	5,710	6,344	7,320	7,547

APPENDIX B.—TEACHERS' INSTITUTES.
FINANCIAL STATEMENT, 1903.

Name of Institute.	Number of Institutes.	Number of Members.	Receipts.					Expenditure.				Balances.
			Government Grant.	Municipal Grant.	Members' Fees.	Balances and other sources.	Total Receipts.	Printing, postage, etc.	Libraries, Educational Journals, etc.	Miscellaneous.	Total expenditure.	
1 Algoma.....	1	98	25 00	25 00	.....	48 22	78 32	6 82	4 25	20 25	31 32	42 00
2 Brant.....	1	132	25 00	25 00	.....	146 30	196 30	5 30	.....	76 50	81 80	114 50
3 Bruce, East.....	1	125	25 00	25 00	.....	18 60	68 60	8 08	17 50	41 93	67 51	1 09
4 Bruce, West.....	1	44	25 00	25 00	11 00	101 45	162 45	5 61	28 50	34 90	68 81	93 54
5 Carleton.....	1	130	25 00	25 00	.....	71 86	137 86	5 80	.....	37 00	42 80	29 05
6 Dufferin.....	1	122	25 00	25 00	16 75	149 10	222 85	12 53	48 25	6 00	59 26	78 49
7 Dundas.....	1	95	25 00	25 00	23 75	149 10	222 85	12 53	.....	109 80	122 33	100 52
8 Durham.....	1	120	25 00	25 00	.....	25 82	75 82	16 25	11 77	47 80	64 05	11 77
9 Elgin.....	1	175	25 00	25 00	.....	177 80	227 80	2 50	.....	33 10	35 60	192 20
10 Essex, North.....	1	60	25 00	25 00	60	.....	25 00	.....	.....	27 00	77 95	135 43
11 Essex, South.....	1	120	25 00	25 00	.....	188 38	213 38	50 95	.....	32 90	87 20	67 20
12 Frontenac.....	1	150	25 00	25 00	50	54 67	104 67	4 57	.....	38 55	62 92	6 25
13 Glengarry.....	1	92	25 00	25 00	.....	19 17	69 17	24 37	.....	48 40	61 55	74 51
14 Grenville.....	1	165	25 00	25 00	.....	86 16	136 16	13 25	.....	65 25	78 00	22 78
15 Grey, East.....	1	85	25 00	25 00	8 75	42 03	100 78	12 75	67 38	35 50	112 65	169 39
16 Grey, South.....	1	52	25 00	25 00	13 00	219 54	282 54	9 77	.....	30 15	87 00	53 19
17 Grey, West.....	1	104	25 00	25 00	10 25	79 94	140 19	10 40	7 55	14 25	36 45	24 54
18 Haliburton.....	1	113	25 00	25 00	.....	280 99	280 99	6 80	.....	16 50	55 55	25 04
19 Haldimand.....	1	59	25 00	25 00	5 50	6 02	61 52	6 23	.....	15 99	36 45	25 04
20 Halton.....	1	98	25 00	25 00	.....	57 19	107 19	8 70	.....	61 65	83 00	67 03
21 Hastings, North.....	1	123	25 00	25 00	91 36	141 36	237 98	22 63	.....	72 00	83 00	154 98
22 Hastings, South.....	1	136	25 00	25 00	217 98	387 98	387 98	11 00	7 80	37 65	56 96	75 37
23 Huron, East.....	1	139	25 00	25 00	13 00	69 33	137 33	4 00	.....	140 15	154 15	24 49
24 Huron, West.....	1	139	25 00	25 00	17 50	116 54	164 54	4 10	.....	178 70	256 20	36 45
25 Kent, East.....	1	136	25 00	25 00	27 78	44 08	121 83	30 18	60	29 00	108 80	155 45
26 Kent, West.....	1	136	25 00	25 00	19 05	176 80	245 85	30 18	7 65	39 00	108 80	155 45
27 Lambton, East.....	1	128	25 00	25 00	.....	70 81	245 81	6 80	.....	29 00	108 80	155 45
28 Lambton, West.....	1	125	25 00	25 00	.....	70 81	245 81	6 80	.....	29 00	108 80	155 45
29 Lanark.....	1	20	25 00	25 00	35 60	134 41	167 56	11 35	45 25	25 95	113 55	125 07
30 Leeds, East (2).....	1	90	25 00	25 00	13 25	134 41	167 56	11 35	45 25	25 95	113 55	125 07

APPENDIX C.—*RURAL PUBLIC SCHOOL LIBRARIES, 1903-4.*

Every rural school board that has established a Library under the conditions of the regulations receives a grant, equivalent to half the amount expended for the year, but not exceeding \$10.

Inspectorate.	Name of school (section number and township) and amount expended for books recom- mended, during the academic year.	Total amount ex- pended for books recom- mended.	Total Government grant.
		\$ c	\$ c
Brant	15 Brantford, 27.40; 13 Burford, 12.50; 13 S. Dumfries, 25.30	65 20	26 25
Bruce W... ..	14 Bruce, 30.37; 3 Culross, 30.91; 7 Culross, 31.33; 8 Culross, 32.18, & Greenock, 13.03; 1 Huron, 16.70; 12 Huron, 25.00; 8 Kin- cardine, 20.10; 11 Kincardine, 16.73; 2 Sau- geen, 14.42; 5 Saugeen, 30.00; 6 Saugeen, 21.46	282 23	110 43
Carleton	8 Fitaroy, 20.00; 3 Gloucester, 12.50; 6 Glou- cester, 10.16; 9 Gloucester, 15.00; 19 Glou- cester, 17.00; 20 Gloucester, 20.00; 13 Goulburn, 35.48; 3 N. Gower, 16.90; 11 N. Gower, 19.10; 1 Marsh, 20.00; 6 Marl- borough, 19.91; 2 Nepean, 33.00; 3 Nepean, 29.87; 11 Osgoode, 40.00; 8 Osgoode, 25.00; 12 Osgoode, 20.00; 2 Torbolton, 20.00	373 92	155 28
Dufferin	2 Amaranth, 25.00; 10 Amaranth, 20.00; 4 E. Garafraxa, 20.44; 5 E. Garafraxa, 10.00; 15 East Garafraxa, 20.00; 8 Melancthon, 27.83; 13 Melancthon, 20.00; 14 Melac- thon, 21.36; 8 Mulmur, 20.00	184 63	85 00
Dundas	5 Mountain, 16.85; 12 Mountain, 10.00; 4 Win- chester, 15.00; 12 Winchester, 45.39	87 24	30 92
Durham	7 Cartwright, 10.00; 6 Darlington, 20.00; 20 Darlington, 5.72	35 72	17 86
Elgin	3 Aldborough, 20.00; 4 Aldborough, 27.97; 5 Aldborough, 20.00; 6 Aldborough, 20.00; 7 Aldborough, 35.00; 10 Aldborough, 21.00; 15 Aldborough, 20.00; 2 Bayham, 30.00; 8 Bayham, 20.00; 9 Bayham, 20.00; 10 Bay- ham, 20.00; 11 Bayham, 10.00; 12 Bayham, 4.00; 5 Dunwich, 20.00; 10 Dunwich, 20.00; 12 Dunwich, 20.00; 1 Malahide, 20.00; 2 Malahide, 25.00; 7 Malahide, 20.00; 8 Malahide, 20.00; 11 Malahide, 27.00; 13 Malahide, 21.00; 14 Malahide, 20.00; 15 Malahide, 20.00; 16 Malahide, 20.00; 1 Southwold, 20.00; 3 Southwold, 20.00; 6 Southwold, 25.00; 7 Southwold, 20.00; 9 Southwold, 20.00; 10 Southwold, 20.00; 11 Southwold, 20.00; 12 Southwold, 35.00; 17 Southwold, 20.00; 21 Southwold, 15.00; 6 S. Dorchester, 20.00; 10 S. Dorchester, 20.00; 3 Yarmouth, 20.00; 7 Yar- mouth, 10.00; 8 Yarmouth, 10.00; 9 Yarmouth, 30.00; 13 Yarmouth, 10.00; 14 Yarmouth, 27.00; 17 Yarmouth, 10.00; 19 Yarmouth, 10.46; 22 Yarmouth, 25.00; 24 Yarmouth, 11.50	9'9 93	430 48

APPENDIX C.—*Continued.*

Inspectorate.	Name of school (section number and township) and amount expended for books recommended, during the academic year.	Total amount expended for books recommended.	Total Government grant.
		\$ c.	\$ c.
Essex N.	3 Maidstone, 31.00; R. C. Sep. School, 1 Sandwich E, 10.00	41 00	15 00
Essex S.	5 Gosfield S., 11.09	11 09	5 54
Frontenac	2 Barrie, 20.00; 16 Bedford, 20.00; 2 Clarendon, 25.00; 4 Hinchinbrooke, 20.00; 9 Hinchinbrooke, 23.73; 2 Kennebec, 25.00; 1 Kingston, 22.90; 2 Kingston, 25.00; 3 Kingston, 20.00; 13 Kingston, 20.00; 14 Kingston, 20.00; 15 Kingston, 20.00; 17 Kingston, 20.00; 18 Kingston, 20.00; 20 Kingston, 20.00; 3 Loughboro, 20.00; 4 Loughboro, 20.00; 14 Loughboro, 20.00; 4 Olden, 20.00; 1 Oso, 20.12; 2 Oso, 20.00; 4 Oso, 20.00; 9 Oso, 20.00; 1 Palmerston, 20.00; 3 Palmerston, 20.00; 6 Palmerston, 20.00; 3 Pittsburgh, 20.00; 5 Pittsburgh, 20.50; 8 Pittsburgh, 27.00; 10 Pittsburgh, 32.90; 13 Pittsburgh, 20.00; 19 Pittsburgh, 20.00; 3 Portland, 25.20; 1 Storrington, 20.00; 2 Storrington, 20.00; 3 Storrington, 25.00; 4 Storrington, 20.10; 5 Storrington, 20.10; 8 Storrington, 20.00; 10 Storrington, 20.00; 12 Storrington, 20.15; 13 Storrington, 20.00; 4 Wolfe Island, 20.00; 5 Wolfe Island, 20.00; 15 Wolfe Island, 20.00	957 70	450 00
Glengarry	16 Kenyon, 12.98	12 98	6 49
Grey E.	4 St. Vincent, 10.40	10 40	5 20
Grey S.	3 Bentinck, 20.00; 7 Egremont, 13.00; 10 Glensig, 17.58; 1 Normanby, 15.00; 4 Normanby, 10.40; 15 Normanby, 20.23; 7 Proton, 16.00; 9 Proton, 20.00	132 21	65 99
Grey W.	6 Holland, 10.00; 3 Derby, 10.00; 8 Sydenham, 6.70	26 70	13 35
Haldimand	7 Walpole, 3.94; 11 Walpole, 10.00; 3 Rainham, 10.00	23 94	11 97
Haliburton, etc.	2 Glamorgan, 10.50; 2 Guilford, 16.50; 1 Monmouth, 10.50; 2 Monmouth, 20.60; 3 Monmouth, 20.90; 5 Monmouth, 23.65; 6 Monmouth, 20.50; 2 Snowdon, 7.60; 3 Chaffey, 20.83; 7 Chaffey, 14.00; 7 Stisted, 30.00	190 58	89 55
Halton	1 Equeusing, 6.00; A. E. Equeusing, 32.00; 6 Trafalgar, 21.00; 12 Trafalgar, 6.00; 18 Trafalgar, 10.00; 3 Nelson, 27.00; 4 Nelson, 10.00	112 00	46 00
Hastings N.	20 Bawdon, 20.15	20 15	10 00
Huron E.	4 Grey, 19.00; 10 Grey, 20.00; 11 Howick, 20.00; 1 Morris, 20.00; 10 Morris, 14.00; 9 Tucker-smith, 16.00	109 00	54 50

APPENDIX C.—*Continued.*

Inspectorate.	Name of school (section number and township) and amount expended for books recommended, during the academic year.	Total amount expended for books recommended.	Total Government grant.
		\$ c.	\$ c.
Huron W.	9 Ashfield, 20.00; 13 Ashfield, 23.95; 2 Colborne, 15.00; 7 Hay, 10.00; 6 Stanley, 20.22; 5 Stephen, 13.59; 11 Stephen, 20.00; 16 Stephen, 28.40; 5 Usborne, 20.15; 6 Usborne, 20.00; 7 Usborne, 20.00; 9 E. Wawanosh, 30.00; 15 W. Wawanosh, 10.00	251 35	114 32
Kent E.	1 Harwich, 20.00; 4 Harwich, 20.00; 7 Harwich, 20.00; 16 Harwich, 20.00; 1 Howard, 33.00; 2 Howard, 23.50; 3 Howard, 20.00; 7 Howard, 20.00; 14 Howard, 10.00; 5 Camden, 33.00; 7 Camden, 23.50; 3 Zone, 10.00; 4 Zone, 40.00	293 00	120 00
Kent W.	1 Chatham, 25.00; 2 Chatham, 20.30; 12 Chatham, 13.00; 17 Chatham, 12.00; U. 1 Chatham, 8.48; 2 Dover, 15.00; 10 Dover, 25.00; 12 Dover, 10.00; 4 S. Raleigh, 10.00; 4 N. Raleigh, 10.00; 10 Raleigh, 10.00;	158 78	74 24
Lambton E.	5 Euphemia, 20.74	20 74	10 00
Lanark	4 Bathurst, 15.00; 5 Bathurst, 12.14; 12 Bathurst, 10.00; 6 Beckwith, 14.80; 11 Drummond, 20.00; 13 Drummond, 20.00; 10 Lanark, 12.50; 3 Ramsay, 15.00; 6 and 7 Ramsay, 29.00; 10 Ramsay, 18.00; 15 Ramsay, 61.00; 1 N. Sherbrooke, 15.00; 2 S. Sherbrooke, 11.50	253 94	101 97
Leeds No. 2	1 Kitley, 30.00; 10 Kitley, 20.00; 15 Kitley, 20.00; 18 Kitley, 10.00; 4 Front and Yonge, 10.00; 17 Front and Yonge, 20.19; 4 Elisabethtown, 10.00; 7 Elisabethtown, 11.97; 9 Elisabethtown, 20.31	152 47	70 98
Leeds No. 3 and Grenville	15 Edwardsburg, 19.60; 8 Oxford, 10.00	29 60	14 80
Lennox and Addington	19 Camden, 9.07; 18 N. Fredericksburg, 31.73; 6 Sheffield, 35.00	75 80	24 53
Lincoln	4 Caistor, 20.00; 1 Caistor, 20.00; U. 2 Clinton and 3 Louth, 33.64; U. 3 Clinton and 4 Louth, 21.50; 2 Clinton, 20.00; U. 1 Clinton and 2 Louth, 30.00; 8 Gainsboro, 20.00; 1 Gainsboro, 20.00; 4 Gainsboro, 20.00; 2 Gainsboro, 20.53; 5 Gainsboro, 20.00; 9 Gainsboro, 20.00; 1 N. Grimsby, 20.00; U. 5 N. Grimsby, 20.00; 11 S. Grimsby, 22.21; 2 Louth, 20.00; 3 Louth, 59.00; 4 Louth, 20.00; 1 Louth, 20.75; 8 Niagara, 20.00	467 43	200 00
Middlesex E.	11 N. Dorchester, 6.40; 16 N. Dorchester, 23.20; 3 Westminster, 2.50; 5 Westminster, 20.00; 10 Westminster, 20.00; 14 Westminster, 15.00	87 10	41 05
Middlesex W.	U. 1 and 2 Adelaide and W. Williams, 20.08; U. 2 Adelaide and E. Williams, 22.21; 1 Ekfrid, 20.00; 6 Lobo, 11.06; 7 Moss, 15.00	88 35	43 07

APPENDIX C.—*Continued.*

Inspectorate.	Name of school (section number and township) and amount expended for books recom- mended, during the academic year.	Total amount ex- pended for books recom- mended.		Total Government grant.	
		\$	c.	\$	c.
Norfolk	2 Middleton, 13.00; 3 Middleton, 20.06; 2 Wind- ham, 9.76; 3 Woodhouse, 3.50	46	32	23	13
Northumberland	17 Cramahc, 25.54; 10 Hamilton, 10.00; 11 and 12 Haldimand, 20.00; 16 and 18 Murray and Brighton, 24.55; 9 Murray and Brighton, 20.00	100	09	45	00
Ontario W.	4 Brock, 20.00; 13 Brock, 20.00; 1 Mara, 20.00; 2 Mara, 20.00; 5 Mara, 20.00; 10 Mara, 20.00; 5 Rama, 20.00; 6 Rama, 20.00; 3 Scott, 20.00; 1 Scugog, 20.00; 2 Scugog, 20.00; 3 Scugog, 20.00; 2 Thorah, 20.00; 5 Thorah, 30.00; 3 Thorah, 20.00; 3 Ux- bridge, 20.00; 9 Uxbridge, 20.00; 7 Ux- bridge, 20.00; 2 Uxbridge, 30.00; 10 Ux- bridge, 10.00; 4 Uxbridge, 20.00; 12 Ux- bridge, 20.00; 6 Uxbridge, 20.00; 11 Ux- bridge, 10.00	480	00	230	00
Ontario S.	4 Reach, 9.93; 1 Reach, 10.00	19	93	9	97
Oxford	6 E. Nissouri, 20.00; 11 E. Nissouri, 10.00; 2 N. Oxford, 2.00; 8 E. Zorra, 25.00; 3 E. Zorra, 20.98; 9 E. Zorra, 12.23; 8 W. Zorra, 22.00	112	21	52	11
Perth	7 Downie, 20.57; 8 Downie, 10.95; U. 2 Elma, 20.80; 3 Elma, 22.00; 7 Elma, 23.71; 7 Hibbert, 20.00; 2 Logan, 20.00; 4 Logan, 10.05; 9 Logan, 20.00; 3 Mornington, 20.00; 12 Mornington, 34.00; U. 5 Wallace, 10.00; 6 Wallace, 4.98	242	06	107	93
Peterboro	1 Otonabee, 27.05; 2 Smith, 13.20	40	25	16	60
Prince Edward	5 Hallowell, 10.00; 13 Hallowell, 10.00; 14 Hallowell, 20.00; 2 Sophiasburgh, 17.22; 4 Sophiasburgh, 20.00; 13 Sophiasburgh, 15.00; 12 Sophiasburgh, 10.00; 14 S. Marys- burgh, 22.00	124	22	61	11
Prescott and Russell	10 N. Plantaganet, 26.06; 1 S. Plantaganet 21.15; 5 Cumberland, 23.08; 6 Cumberland, 20.05; 8 Cumberland, 10.55; 4 Clarence, 20.00; 3 Russell, 20.57	141	47	65	27
Renfrew	6 Admaston, 12.67; 8 Bromley, 26.74; 4 Grat- tan, 27.55; 7 Radcliffe, 20.00; 8 Ross, 30.68; 5 Stafford, 17.30; 1 Stafford, 11.00	139	94	60	48
Simcoe E. and W. Muskoka	6 Medonte, 18.50; 15 Medonte, 27.90; 5 Orillia, 20.00; 7 Orillia, 30.24; 13 Orillia, 30.00; 10 Oro, 22.19; 16 Oro, 23.25; 6 Tay, 20.21; 12 Tay, 27.00; 2 Medora, 20.00; 3 Medora, 30.00; 2 Morrison, 20.00; 3 Morrison, 20.00; 4 Morrison, 7.44; 5 Morrison, 6.48; 5 Watt, 30.00	353	21	146	21

APPENDIX C.—*Concluded.*

Inspectorate.	Name of school (section number and township) and amount expended for books recommended, during the academic year.	Total amount expended for books recommended.	Total Government grant.
		\$ C.	\$ C.
Stormont	3 Finch, 20.00	20 00	10 00
Victoria E.	7 Ops, 30.00	30 00	10 00
Victoria W.	17 Mariposa, 10.00; 8 Eldon, 56.38	66 38	15 00
Waterloo	4 Wellesley, 12.00; 16 Wellesley, 23.69; 8 Woolwich, 10.00	45 69	21 00
Wellington N.	6 Peel, a30.00; 13 Peel, 7.10	37 10	18 55
Wellington S.	1 Erin, 18.18; 1 W. Garafraxa, 13.81; 6 W. Garafraxa, 19.20	51 19	23 59
Wentworth	2 Ancaster, 20.00; 5 Ancaster, 15.64; 10 Ancaster, 20.00; 3 Barton, 20.00; 9 Beverly, 24.00; 10 Beverly, 9.39; 13 Beverly, 10.00; 14 Beverly, 20.00; 1 Binbrook, 27.74; 6 Flamboro E., 21.65; 4 Flamboro W., 10.00; 6 Flamboro W., 17.85; 2 Glanford, 20.11	236 38	111 43
York N.	4 Georgina, 33.85; 7 E. Gwillimbury, 27.50; 10 E. Gwillimbury, 20.00; 3 E. Gwillimbury, 20.00; 5 Vaughan, 4.35; 7 Whitchurch, 9.95; 9 Whitchurch, 12.00	127 65	53 14
York S.	1 Etobicoke, 20.00; U. 3 Etobicoke and 24 York, 20.00	40 00	23 00
Algoma	Massey Station, 20.00	20 00	10 00
Manitoulin	1 Robinson, 20.00; 1 Tehkumamah, 25.00	45 00	20 00
Parry Sound	3 Perry, 30.00; 4 Ryerson, 20.00; 1 Spence, 19.90; 5 Strong, 15.00	84 90	37 25
R. O. Separate Schools W. Ontario	1 Carrick and Culross, 11.00; 9 Downie, 20.00; 3 Holland, 10.00; 5 Raleigh, 10.53; 6 Raleigh, 20.00; 7 Sydenham, 10.00	81 53	40 76
Totals, 1903-4, 424 Libraries..		8,195 70	3,656 41
Totals, 1902-3, 320 Libraries..		6,889 02	2,894 22
Increases —104 Libraries..		1,306 68	762 19

a Twenty dollars of this sum were expended in the preceding year.

APPENDIX D.—INSPECTION OF SCHOOLS.

I.—LIST OF INSPECTORS, 1904.

Public School Inspectors.	Jurisdiction.	Post Office.	Salary (travel- ling expenses included in some cases) for 1903.
			\$ c.
T. W. Standing, B.A.	Brant; Town of Paris	Brantford	1,155 00
W. S. Clendenning.....	Bruce, East; Towns of Walkerton, Wiarton; Villages of Chesley, Tara	Walkerton	1,470 00
W. I. Chisholm, M.A.....	Bruce, West; Town of Kincardine; Villages of Lucknow, Paisley, Port Elgin, Southampton, Teeswater, Tiverton	Kincardine	1,430 00
Robert H. Cowley, B.A.	Carleton; Villages of Hintonburg, Ottawa East, Richmond	Ottawa	1,355 00
Nathaniel Gordon	Dufferin; Town of Orangeville; Villages of Grand Valley, Shelburne	Orangeville	1,440 00
Arthur Brown	Dundas; Villages of Chesterville, Iroquois, Morris- burg, Winchester	Morrisburg... ..	1,090 00
W. E. Tilley, M.A., Ph.D.	Durham and S. Monaghan Tp.; Towns of Bowman- ville, Port Hope; Villages of Millbrook, New- castle.....	Bowmanville	1,420 00
Welburn Atkin.....	Elgin; Town of Aylmer; Villages of Dutton, Port Stanley, Springfield, Vienna	St. Thomas... ..	1,638 50
a D. Chenay.....	Essex, North (No. 1); Town of Sandwich; Village of Belle River	Windsor	750 00
D. A. Maxwell, B. A., LL.B., Ph.D.	Essex, South (No. 2); Towns of Amherstburg, Essex, Kingsville, Leamington	Windsor	b 1,725 00
Wm. Spankie, M.D.....	Frontenac; Villages of Garden Island, Portsmouth Don'd McDiarmid, M.D.	Kingston	1,545 00
	Glengarry; Town of Alexandria; Villages of Lan- caster, Maxville	Maxville	1,048 11
Andrew Grier	Grey, East; Town of Thornbury	Thornbury	1,051 00
H. H. Burgess, B.A.....	Grey, West; Town of Owen Sound; Village of Chatsworth	Owen Sound	1,300 00
N. W. Campbell	Grey, South; Towns of Durham, Meaford; Villages of Dundalk, Hanover, Markdale	Durham	1,552 00
Clarke Moses	Haldimand; Town of Dunnville; Villages of Cale- donia, Cayuga, Hagersville	Caledonia	1,223 25
Sylvanus Phillips, B.A.	Haliburton, North East Muskoka; South Nipissing, East Parry Sound; Town of Huntsville	Minden	1,627 00
J. S. Deacon	Halton; Towns of Milton, Oakville; Villages of Acton, Burlington, Georgetown	Milton	1,410 00
William Mackintosh...	Hastings, North; Villages of Madoc, Marmora, Stirling	Madoc	1,547 50
John Johnston	Hastings, South; City of Belleville; Towns of Deseronto, Trenton; Village of Tweed	Belleville	1,625 00
David Robb	Huron, East; Towns of Clinton, Seaforth, Wingham; Villages of Blyth, Brussels, Wrox- eter	Brussels	1,454 25
J. Elgin Tom	Huron, West; Town of Goderich; Villages of Bayfield, Exeter, Hensall	Goderich	1,542 00
Rev. W. H. G. Colles...	Kent, East; Towns of Blenheim, Bothwell, Ridge- town; Village of Thamesville	Chatham	980 00
Robert Park	Kent, West; City of Chatham; Towns of Dresden, Wallaceburg; Village of Tilbury	Chatham	1,586 75
C. A. Barnes, M.A.....	Lambton, East (No. 2); Town of Petrolea; Villages of Alvinston, Arkona, Oil Springs, Watford	Petrolea	1,524 00
D. D. Moshier, B.A., B. Paed	Lambton, West (No. 1); Towns of Forest, Sarnia; Villages of Point Edward, Thedford, Wyoming	Sarnia	1,420 50

a. Also Inspector of R. C. Bilingual Schools in Essex and Kent.
b. Including salary for Windsor and Walkerville.

LIST OF INSPECTORS, 1904.—Continued.

Public School Inspectors.	Jurisdiction.	Post Office.	Salary (travel- ling expenses included, as in c. above) for 1904.
F. L. Michell, M.A.	Lanark; Towns of Almonte, Carleton Place, Perth,		\$ c.
Wm. Johnston, M. A.,	Smith's Falls; Village of Lanark	Perth	1,835 00
LL.B.	Leeds and Grenville, (No. 1); Town of Gananoque;		
	Villages of Newboro, Westport	Athens	1,225 00
Robert Kinney, M.D.	Leeds and Grenville, (No. 2); Village of Athens	Brockville ...	1,110 00
T. A. Craig	Leeds and Grenville, (No. 3); Town of Prescott;		
	Villages of Cardinal, Kemptville, Merrickville...	Kemptville ..	1,120 00
Frederick Burrows	Lennox and Addington; Town of Napanee; Vil-		
	lages of Bath, Newburgh	Napanee	1,457 00
W. W. Ireland, B.A.	Lincoln; Town of Niagara; Villages of Beams-		
	ville, Grimsby, Merritton, Port Dalhousie	St. Catharines	1,386 00
P. J. Thompson, B.A.	Middlesex, East; Village of Lucan	London	1,279 00
H. D. Johnson	Middlesex, West; Towns of Parkhill, Strathroy;		
	Villages of Ailsa Craig, Glencoe, Newbury,		
	Wardsville	Strathroy ...	1,185 00
c. H. Frank Cook, B.A.	Norfolk; Town of Simcoe. Villages of Delhi, Port		
	Dover, Port Rowan, Waterford	Simcoe	d 1,535 00
Albert Odell	Northumberland; Town of Cobourg; Villages of		
	Brighton, Campbellford, Colborne, Hastings	Cobourg	1,564 13
James McBrien	Ontario, North; Town of Uxbridge; Villages of		
John Waugh, B.A., D,	Beaverton, Cannington, Port Perry	Prince Albert,	1,015 00
Paed	Ontario, South; Towns of Oshawa, Whitby	Whitby	1,105 50
William Carlyle	Oxford; City of Woodstock; Towns of Ingersoll,		
	Tillsonburg; Villages of Embro, Norwich	Woodstock ...	1,575 00
Allan Embury	Peel; Town of Brampton; Villages of Bolton,		
	Streetsville	Brampton ...	1,200 00
William Irwin, B.A.	Perth; Towns of Listowel, Mitchell, St. Mary's;		
	Village of Milverton	Stratford ...	1,691 75
J. Coyle Brown	Peterborough; Villages of Havelock, Lakefield,		
	Norwood	Peterboro ...	1,380 00
W. J. Summerby	Prescott and Russell; Towns of Hawkesbury, Van-		
	kleek Hill; Villages of Casselman, L'Orignal,		
	Rockland	Russell	1,192 50
G. D. Platt, B.A.	Prince Edward; Town of Picton; Village of Wel-		
	lington	Picton	1,037 00
B. G. Scott, B.A.	Renfrew; Towns of Arnprior, Pembroke, Renfrew;		
	Villages of Cobden, Eganville	Pembroke ...	2,140 00
J. C. Morgan, M.A.	Simcoe, North. Towns of Barrie, Midland, Orillia,		
	Penetanguishene; Village of Creemore	Barrie	1,616 00
Rev. Thos. McKee	Simcoe, Southwest; Towns of Alliston, Stayner;		
	Villages of Beeton, Bradford, Tottenham	Barrie	1,450 00
Isaac Day, B.A.	Simcoe, East, and West Muskoka; Town of		
	Gravenhurst; Village of Port Carling	Orillia	1,536 25
Alexander McNaughton	Stormont; Town of Cornwall	Cornwall ...	1,015 00
J. H. Knight	Victoria, East; Town of Lindsay; Villages of		
	Bobcaygeon, Omemee	Lindsay	861 75
W. H. Stevens, B.A.	Victoria, West, and Southeast Muskoka; Town of		
	Bracebridge; Villages of Fenelon Falls, Wood-		
	ville	Lindsay	1,423 00
Thomas Pearce	Waterloo, No. 1; Towns of Berlin, Hespeler,		
	Preston, Waterloo; Village of Elmira	Berlin	2,300 00
C. F. W. Sheppard....	Waterloo, No. 2; Town of Galt; Villages of Ayr,		
	New Hamburg	Berlin	
J. H. Ball, M.A.	Welland; City of Niagara Falls; Towns of Thor-		
	old, Welland; Villages of Bridgeburg, Chip-		
	pawa, Fort Erie, Port Colborne	Welland	1,413 75

c. Appointed in 1904.

d. Salary of former Inspector.

I.—LIST OF INSPECTORS, 1904.—Continued.

Public School Inspectors.	Jurisdiction.	Post Office.	Salary (travel- ling expenses included in some cases) for 1904.
David Clapp, B.A.....	Wellington, North; Towns of Harriston, Mount Forest, Palmerston; Villages of Arthur, Clif- ford, Drayton	Harriston	1,100 00
J. J. Craig, B.A.....	Wellington, South; Villages of Elora, Erin, Fergus	Fergus	1,100 00
J. H. Smith	Wentworth; Town of Dundas; Village of Water- down	Hamilton	1,270 00
A B Davidson, B.A....	York, North; Towns of Aurora, Newmarket; Vil- lages of Holland Landing, Richmond Hill, Sutton	Newmarket	1,119 00
David Fotheringham...	York, South; Towns of East Toronto, North Toron- to, Toronto Junction; Villages of Markham, Stouffville, Weston, Woodbridge	Toronto	1,725 50
John Ritchie	Districts of Thunder Bay, Rainy River; Towns of Fort Frances, Fort William, Port Arthur, Rat Portage, Rainy River	Port Arthur	c 625 00
b L. A. Green, B.A....	District of Algoma; Towns of Bruce Mines, Mas- sey, Sault Ste. Marie, Steelton, Thessalon	S. Ste. Marie	d 1,800 00
Donald McCaig.....	Manitoulin Island, etc.; Towns of Collingwood, Gore Bay, Little Current	Collingwood	2,024 20
b J. B. McDougall, B.A	District of North Nipissing, etc.; Towns of Cache Bay, Copper Cliff, Haileybury, Mattawa, New Liskeard, North Bay, Sturgeon Falls, Sudbury	North Bay...	
Rev. Geo. Grant, B.A.	District of West Parry Sound; Town of Parry Sound; Villages of Burk's Falls, Sundridge.	Orillia	1,815 27
a Wm. Wilkinson, M.A.	City of	Brantford	d 400 00
Wm. Tytler, B.A.....	do	Guelph	600 00
W. H. Ballard, M.A....	do	Hamilton	2,209 00
W. G. Kidd	do	Kingston	1,400 00
e C. B. Edwards, B.A	do	London	d 1,585 00
John C. Glasham, LL.D	do	Ottawa	2,400 00
J. B. Grey	do	St. Catharines	400 00
S. Silcox, B.A., D. Paed.	Prin. Co. Model School, City of	St. Thomas	1,200 00
J. Russell Stuart	do do do	Stratford	1,200 00
James L. Hughes	City of	Toronto	3,500 00
W. F. Chapman	do	Toronto	2,250 00
e Robt. Mead, M.A	City of Windsor and Town of Walkerville	Windsor	
John Connolly	Town of	Brockville	1,000 00
Duncan Walker, B.A....	do	Peterboro	1,200 00
Total			105,791 46

a. Appointed in 1904, since deceased. J. P. Hoag, B.A., appointed, duties to commence 1st May, 1905.

b. Duties commenced January, 1904.

c. Five months' salary.

d. Salary of former Inspector.

e. Appointed in 1904.

LIST OF INSPECTORS, 1904.—*Concluded.*

Other Inspectors.	Post Office.	Salary, 1903.	Travelling expenses paid, 1903.	Total.	
<i>Separate School Inspectors:</i>		\$ c.	\$ c.	\$ c.	\$ c.
Wm. Prendergast, B.A.	Toronto.....	1,700 00	414 05	2,114 05	
Michael O'Brien	Peterborough.....	1,700 00	566 25	2,265 25	
John F. Power, M.A.	London.....	1,700 00	418 90	2,118 90	
<i>Inspector of Bilingual Separate Schools:</i>					
Telesphore Rochon, B.A., (East)	Clarence Creek.....	1,500 00	304 45	1,804 45	
a D. Chenay, (West)	Windsor.....				
<i>Inspector Technical Schools:</i>					
Albert H. Leake	Toronto.....				
<i>County Model School Inspector:</i>					
John J. Tilley	Toronto.....	1,850 00	407 10	2,257 10	
<i>High School Inspectors:</i>					
John E. Hodgson, M.A.	Toronto.....	2,750 00	477 40	3,227 40	
John Seath, M.A., LL.D.	Toronto.....	2,750 00	420 75	3,170 75	
Total					18,458 90
Grand total (all Inspectors)					124,250 36

a. Also Inspector of Public Schools, Essex North.

II. DIPLOMAS FOR SCHOOL PREMISES, 1904.

Name of Inspector.	Jurisdiction.	No. of schools reported as receiving dip- lomas in 1904.	Name of Inspector.	Jurisdiction.	No. of schools reported as receiving dip- lomas in 1904.
T. W. Standing.....	Brant	9	Chas. A. Barnes.....	Lambton, E.	15
R. W. Cowley	Carleton	23	D. D. Moshier	Lambton, W.	13
Arthur Brown.....	Dundas	18	P. J. Thompson ..	Middlesex, E.	4
W. E. Tilley.....	Durham	5	H. D. Johnson.....	Middlesex, W.	6
J. S. Deacon.....	Halton.....	22	Thos. Pearce.....	Waterloo	19
D. Robb.....	Huron E.	19	J. H. Smith	Wentworth.....	25
Robt. Park	Kent, W.	48	D. Fotheringham...	York, S.	5

APPENDIX E.—CONTINUATION CLASSES 1903-1904.

Inspectorate,	Name of Principal and Degree.	Professional Certificate.	No. of Teachers.	Name of School.	No. of Pupils.	Class of School.			
						A	B	C	D
Brant	Arthur E. Green	I	4	8 S. Dumfries	12	1			
	Charlotte Ballackey	I	1	11 Burford	5				1
Bruce E.....	B. D. McMurphy,								
	B. A.	I	9	*Chesley Village.....	74	1			
	A. M. Sheppard	I	3	14 Carrick	14			1	
Bruce W.....	J. F. Loney	II	2	U. 3 Amable	5				1
	E. U. Dickenson,								
	B. A.	I	7	† Paisley Village... ..	62	1			
	D. L. Strachan	I	5	Teeswater, Village	36	1			
	Jos. Stalker	II	5	Lucknow Village	35		1		
	Jas. McPherson	I	3	10 Huron	11		1		
	Chas. Cameron	I	3	Tiverton Village	12		1		
	Jno. Thos. Kidd	II	1	7 Bruce	6			1	
	John H. Young	III	1	16 Bruce	6				1
	Margaret L. Stewart	III	1	2 Culross	3				1
	John A. Bush	II	1	12 Culross	5				1
	Kath'rine MacNabb	II	1	14 Huron	5				1
Carleton	Richard D. Lane	III	1	2 Kinloss	3				1
	W. Graham Lavery	III	1	10 Kinloss	9				1
	Muriel Payne	I	2	8 Fitzroy	11	1			
	Margaret Stephen... ..	I	4	† Nepean	16	1			
	Mary D. Harkness... ..	I	3	11 Osgoode	34	1			
	Samuel Acheson... ..	II	8	Hintonburg Village.	26	1			
	Wallace Pettapiece... ..	II	2	6 N. Gower	8			1	
	Ernest Worley	II	3	3 Huntley	7			1	
	Janie Potter	II	2	5 Fitzroy	4				1
	Jessie Potter	II	1	7 Goulburn	3				1
	Lina Argue	III	1	1 Huntley	3				1
	Andrew J. Kerr	III	2	Richmond Village	7				1
Dufferin	B. E. Thackeray,								
	B. A.	I	5	Grand Valley Vill'e	12	1			
	T. E. Langford, M.A.	I	7	† Shelburne Village.. ..	42	1			
Dundas	Wm. Heath	II	2	17 Mono	7			1	
	H. B. Fetterly, B.A.	I	7	Winchester Village... ..	43	1			
	Geo. H. Steer	I	4	Chesterville Village.	29	1			
	Horatio Loucks	I	4	12 Winchester	37	1			
	Frank Anderson	II	2	U18 Williamsburgh	5				1
Durham	Gideon O. Barclay... ..	III	2	2 Winchester	4				1
	W. B. Poaps	III	2	22 Mountain	5				1
	D. Hampton	II	4	Millbrook Village	41	1			
	Hanna Staples	II	1	15 Manvers	5			1	
	Frank F. Staples	III	3	12 Clarke	6			1	
Elgin	Becca Fair	II	1	9 Cavan	3				1
	Gertrude Gardiner... ..	II	1	15 Cavan	4				1
	E. S. Williams	I	4	5 Aldborough	27	1			
	Henry Wing	I	4	6 Aldborough	21	1			
	Geo. Stewart	II	3	Springfield Village... ..	19	1			
	J. W. Brown	II	2	9 Southwold	10		1		
	J. B. McFadyen	II	2	12 Southwold	10		1		
	Geo. Dale	II	3	11 S. Dorchester	9		1		
	Isaac McLean	II	2	10 Aldborough	5			1	
	Laura Graham	I	1	5 Dunwich	5			1	
	Arthur Curtis	II	2	13 Dunwich	7			1	
	Annie McKillop	II	1	4 Aldborough	4				1
	T.H. Bell	II	2	2 Bayham	3				1
	Geo. Priddle	II	2	18 Bayham	3				1
	Martha Duncanson... ..	III	1	10 Dunwich	4				1

* Three teachers, two of whom are university graduates, doing Cont. Class work only.

† Two teachers, both university graduates, doing Cont. Class work only.

‡ Organized January, 1904.

APPENDIX E.—*Continued.*

Inspectorate.	Name of Principal and Degree.	Professional Certificate.	No. of Teachers.	Name of School.	No. of Pupils.	Class of School.			
						A	B	C	D
Elgin,— <i>Con.</i>	Nellie Harris	II	1	8 Malahide	4				1
	Agnes Murray	II	1	1 Southwold	3				1
	Amy McGugan	III	1	4 Southwold	3				1
	W. E. Van Velsor	II	1	7 Southwold	3				1
	J. C. McLennan	III	1	11 Southwold	3				1
	E. P. Lewis	III	2	7 Yarmouth	3				1
	Sara Jackson	I	1	5 Yarmouth	3				1
	B. A. Catherwood	II	2	Port Stanley Village	3				1
Essex N.	Nellie Moynahan	II	1	6 Sandwich S.	12			1	
Essex S.	Etta M. Stewart,								
	B. A.	I	5	*4 Tilbury W.	36	1			
	Agnes Johnston	I	7	*Amherstburg Town.	30	1			
	Hugh M. Beaton	II	7	Walkerville Town	20	1			
	Fred. J. Voaden	II	7	Kingsville Town	20		1		
	Wm. J. Elliott	I	3	9 Colchester S.	10			1	
Frontenac	Marion J. Whyte	I	3	9 Oso	3				1
Glengarry	Edith M. Maybee	I	3	Maxville Village	15			1	
	W. B. McEwen	II	3	12 Charlottenburg	4				1
	John E. Galbraith	I	3	Lancaster Village	6				1
Grey E.	Geo. B. Stillwell	III	1	U5 Euphrasia	3				1
	F. O. Lunan	III	1	8 Collingwood	4				1
Grey S.	Thos. Allan	I	8	*Durham Town	51	1			
	J. E. Coombes	I	7	Hanover Village	34	1			
	Jas. S. Rowe	II	4	Markdale Village	24		1		
	N. C. Mansell	II	3	5 Artemesia	8			1	
	W. J. Blakeston	II	4	Dundalk Village	10			1	
	Chas. E. Stuart	III	2	U12 Artemesia	6			1	
	J. A. Graham	II	1	11 Bentinck	4				1
	Alex. Firth	II	1	1 Glenelg	3				1
Grey W.	A. B. Cooper	I	3	Chatsworth Village	10				1
Haldimand	Dawson F. Aiken	I	4	10 Walpole	19	1			
	J.L. Mitchener, B.A.	I	2	3 Walpole	19		1		
	Ida J. Saunders	II	1	17 Walpole	3				1
Haliburton, etc.	A. C. Bernath	I	8	Huntsville Town	17	1			
	Geo. R. Coombs	II	4	8 S. Himsworth	6			1	
	S. W. Kidd	I	2	2 Machar	4				1
Halton	W. F. Inman	I	2	*Milton Town	47	1			
	W. H. Stewart	I	2	*Aton Village	32	1			
	W. J. McGlenahan	II	1	3 Nelson	6			1	
	Ida A. Ford	III	1	1 Trafalgar	4				1
Hastings N.	E. T. Williams	II	4	Marmora Village	9				1
Hastings S.	John Bell	II	5	Tweed Village	12		1		
	O. S. Hicks	II	2	2 Sidney	6			1	
	Lester Ross	II	2	13 Sidney	6			1	
	M. W. Mott	II	2	12 & 14 Thurlow	6			1	
	Adam Kiernan	II	1	29 Tyendinaga	6			1	
	A. B. Collins	II	1	16 Hungerford	4				1
Huron E.	A. H. Musgrove	II	9	*Wingham Town	76	1			
	I. H. Cameron	I	6	*Brussels Village	75	1			
	Gilbert Summers	I	4	Blyth Village	23	1			
	John Hartley	II	2	Wroxeter Village	7			1	
	Thos. G. Shillinglaw	II	1	9 Tuckersmith	5			1	
	I. R. Torrance	I	2	7 Howick	13			1	
	W. H. Downey	I	2	17 Howick	10			1	
	Elsie Allen	I	1	1 Turnberry	4				1
	Alex. McEwen	II	2	4 Turnberry	4				1
	Douglas Fraser	II	1	9 Turnberry	7			1	
	Isabella Aitchison	II	1	1 Tuckersmith	5				1
	Thos. N. Forsyth	II	1	2 Tuckersmith	5				1
	Nina J. Isbister	II	1	7 Morris	5				1

* Two teachers doing Cont. Class work only.

APPENDIX E.—Continued.

Inspectorate.	Name of Principal and Degree.	Professional Certificate.	No. of Teachers.	Name of School.	No. of Pupils.	Class of School.			
						A	B	C	D
Duron W.....	Louis C. Fleming.....	I	8	*Exeter Village	74	1			
	Wm. McKay	II	3	Hensall Village	11			1	
	Fred Ross	II	1	4 Ashfield	9			1	
	Wm. H. Johnston.....	II	1	14 Stanley	7			1	
	Claude Bluett	II	3	5 Stephen	12			1	
	Wm. Geiger	II	3	16 Stephen	9			1	
	Wm. J. Taylor	III	1	3 W. Wawanosh	6			1	
	Olive Helyar	II	1	17 W. Wawanosh	7			1	
	Linda Milne	II	1	11 E. Wawanosh	5			1	
	Thos. G. Allen.....	II	2	8 Ashfield	11			1	
	W. H. Robinson	II	2	Bayfield Village	3				1
	W. B. Hawkins	II	1	9 Ashfield	8				1
	Will N. Courtice	III	1	16 Ashfield	7				1
	Frances E. McLean	III	1	1 Colborne	5				1
	Harry R. Long	II	1	2 Colborne	7				1
	Ella M. Patterson.....	II	1	3 Colborne	5				1
	L. L. McMath	III	1	8 Goderich	6				1
	R. F. Stelck	III	3	7 Hay	4				1
	Geo. Baird, Sr.....	I	1	1 Stanley	3				1
	D. McDougall	II	2	6 Usborne	6				1
	Alex. F. McDonald	III	1	4 W. Wawanosh	5				1
	H. I. Morrish	II	1	6 E. Wawanosh	3				1
	Lillian Robinson	III	1	16 E. Wawanosh	3				1
Kent E.....	John E. Anderson,								
	B. A.	I	8	Blenheim Town	27	1			
	Henry H. Kelly,								
	B. A.	II	4	Bothwell Town.....	34	1			
	Clement Milburn	I	4	6 Orford	32	1			
	Jas. G. Cameron	II	4	Thamesville Village..	32	1			
	J. E. Caldwell	II	2	3 & 4 Orford	12		1		
	Eva Hunter	II	2	2½ Harwich	8			1	
	Charlotte Hoig	III	2	4 Harwich	6			1	
	Flora Campbell	II	1	6 Harwich	6			1	
	Grant Nablo	III	1	8 Harwich	6			1	
	Jas. R. Newkirk	I	1	9 Harwich	5			1	
	Margaret Smith	III	1	10 Harwich	5			1	
	J. Scott Stephenson	II	1	11 Harwich	5			1	
	Lizzie Noack	II	1	13½ Harwich	10			1	
	Lila Gregory	III	1	16 Harwich	5			1	
	Emma Bottoms	II	1	1 Howard	5			1	
	Eliza Smith	II	1	3 Howard	7			1	
	Edith Reyecraft	III	1	7 Orford	9			1	
	Margaret Scurrah	II	1	8 Camden	8			1	
	Mary McCully	II	1	3 Harwich	3				1
	Stella Rowe	II	1	7 Harwich	4				1
	Duncan Johnston.....	II	1	2 Howard	6				1
	Robt. Watson	II	1	10 Howard	4				1
	Norman C. Willson	III	1	13 Howard	4				1
	Florence McDonald	II	1	12 Howard	4				1
	Ethel Brown	III	1	1 Orford	3				1
	Albert Mahler	III	1	11 Orford	4				1
	Katha Johnston	II	1	5 Zone	3				1
Kent W.....	Jos. Morgan, B.A.....	I	10	† Wallaceburg Town	78	1			
	G. A. Miller	I	8	Dresden Town	38	1			
	I. S. McAllum	II	3	Tilbury Village	20		1		
	C. Ross McColl	III	2	5 Raleigh & Tilbury E.	15		1		
	Beatrice Boulton	III	1	12 Chatham	6			1	
	Gordon Griffin	III	1	11 Dover	9			1	
	H. M. Fleming.....	III	1	5 Raleigh	8			1	

* Three teachers doing Continuation Class work only.

† Two teachers, both University graduates, Continuation Class work only.

APPENDIX E.—Continued.

Inspectorate.	Name of Principal and Degree.	Professional Certificate.	No. of Teachers.	Name of School.	No. of Pupils.	Class of School.			
						A	B	C	D
Kent W.—Con...	Margaret McIsaac...	II	1	7 Raleigh	6			1	
	Wm. S. Bell	II	1	5 Raleigh & Dover	7			1	
	Belle P. Roxburgh...	II	1	1 Romney	5			1	
	W. C. Dainty	II	4	4 Romney & Mersea	10			1	
	Lizzie Stewart	II	1	3 M. Tilbury E.	7			1	
	Roger Hutchison	III	1	3 S. Tilbury E.	7			1	
	Lizzie Wilson	II	2	5 E. Tilbury E.	7			1	
	Louisa Palmer	III	1	8 Tilbury E.	3				1
	Maggie E. Rowe	II	1	6 N. Chatham	4				1
	Carry M. Rowe	II	1	6 S. Chatham	5				1
	Edna B. Stripp	III	1	18 Chatham	3				1
	Nettie McKnight	II	1	1 Chatham & Camden	5				1
	Effie E. Denhardt	III	1	12 Dover	5				1
	Minnie J. Bagnell...	II	1	4 S. Raleigh	4				1
	Berta Robinson	III	1	12 Raleigh	4				1
	Alice Estabrook	III	1	2 W. Tilbury E.	4				1
Lambton E.....	Francis Tanton	I	6	* Alvinston Village..	40	1			
	Libbie Cruickshank	I	6	Oil Springs Village..	32	1			
	Jas. J. Wilson	II	2	17 Enniskillen	9			1	
	Mary E. Gordon	II	1	13 Dawn	4				1
	Benj. Parker	II	3	Arkona Village	3				1
Lambton W.....	J. D. Williamson	II	2	18 Moore	13		1		
	Neil McLean	II	3	Wyoming Village	6			1	
	Maggie Logan	II	1	3 Bosanquet	4				1
	Fran's I. Armstrong	II	1	8 Bosanquet	4				1
	Maggie McKinlay	II	1	10 Sarnia	4				1
	Robert Dodds	III	1	17 Sombra	4				1
	N. J. Kearney	II	2	Thedford Village	3				1
Lanark	R. Beatty	II	5	Lanark Village	44	1			
	Mima A. Ellis	II	4	4 Pakenham	42	1			
	Mrs. E. J. Foley	II	2	12 Bathurst	3				1
	Ida Paul	II	2	11 Ramsay	3				1
Leeds & Grenville 1	Jas. Magee	I	4	4 N. Crosby	14	1			
	A. Morton	II	3	Newboro' Village	10		1		
	L. Earle	II	2	5 S. Crosby	6			1	
	Wm. Jones	II	2	4 Leeds & Lansdowne					
	N. Dier	III	2	6 Bastard	5				1
Leeds & Grenville 2	Vina Cauley	II	2	11 Kitley	3				1
	Jennie Page	II	1	2 & 3 Front of Yonge	3				1
	Libbie E. Thompson	II	2	4 Front of Yonge	3				1
Leeds & Grenville 3	C. Edna Leighton	I	5	Merrickville Village..	33	1			
	Geo. Weedmark	II	6	Cardinal Village	6			1	
	Jas. E. Burchell	II	2	15 Edwardsburg	3				1
	W. J. MacLachlan	II	2	1 and 5 Oxford	3				1
	Wm. J. Adams	III	1	13 Edwardsburg	3				1
Lennox & Add'gton	R. H. Hutchinson	I	3	Bath Village	29	1			
	A. Stevenson	III	1	1 Amherst Island	5				1
	J. W. Wilson	III	1	4 S. Fredericksburgh ..	5				1
	Louise Limbert	III	1	7 Richmond	5				1
Middlesex E.....	J. A. Scott	II	2	2 Delaware	10			1	
	Mabel Merritt	II	1	3 London	8			1	
	Jas. D. McDonald	II	2	4 Dorchester N.	3				1
	Christina Howlett	II	1	15 Dorchester N.	4				1
	Sara McMillan	II	1	5 Nissouri W.	3				1
	Flora McColl	II	1	10 Westminster	4				1
	Olive McIntyre	III	1	14 Westminster	7				1
	Frances Cleveland	II	1	15 Westminster	3				1
	Mary Bell	II	1	19 & 21 Westminster ..	8				1

* Two teachers doing Continuation Class work only.

Inspectorate.	Name of Principal & Degree.	Professional Certificate.	No. of Teachers	Name of School.	No. of Pupils.	Class of School.				
						A	B	C	D	
Middlesex W.....	C. J. Bradley	II	2	15 Caradoc	13		1			
	W. G. Robinson	II	2	U16 Caradoc & Ekfrid...	16		1			
	Mary McEachran	I	1	6 Ekfrid	8			1		
	Chas. George	II	1	7 Lobo	5			1		
	Cassie McKenzie	II	2	13 Ekfrid	3				1	
	Annie McKellar	II	1	3 Lobo	6				1	
	D. J. McGugan	III	1	8 Lobo	6				1	
	Edna Stewart	II	1	1 E. Williams	3				1	
	Jno. A. Armstrong	II	2	Newbury Village.....	3				1	
	Norfolk	J. A. Irwin	I	4	Delhi Village	14		1		
Thos. J. Hicks		II	2	5 Charlotteville	9			1		
Mary E. Trinder		II	1	13 Charlotteville	3				1	
Mary F. Tisdale.....		III	1	12 Townsend	3				1	
Maggie Thompson		II	2	22 Walsingham	6				1	
Northumberland ...	E. J. Wetthey, B.A.	I	4	2 Percy	43	1				
	Geo. Dawe	II	2	2 Alnwick	4				1	
	Minnie Downs	III	1	9 Percy	3				1	
Ontario N.....	J. Givens	II	3	Beaverton Village	17		1			
	Kate Fox	III	1	7 Mara	6			1		
	M. Cameron	II	1	2 Mara	5			1		
	Wm. Fallowdowne.....	II	3	13 Brock	9			1		
	R. J. Johnston	II	4	Cannington Village..	6			1		
	M. Healey	II	1	6 Mara	6			1		
	Harold Martin	II	1	2 Thorah	8			1		
	Blanche McPhee	III	1	5 Mara	4				1	
	Maggie Thompson.....	III	1	10 Mara	3				1	
	Lettie Tipp	III	1	9 Brock	3				1	
	J. M. Kelly	II	1	3 Mara	4				1	
	Richard Gaughan.....	II	1	4 Mara	3				1	
	Ontario S.....	Wm. Flummerfelt.....	II	2	15 Pickering	4				1
H. E. Ricker		I	5	Norwich Village	27	1				
Oxford	C. A. Garthwaite	II	3	6 S. Norwich	11		1			
	P. H. Hendershot	II	2	U3 N. Norwich	10			1		
	J. M. Scott	II	4	15 E. Nissouri	15			1		
	H. A. Glaspell	II	4	U13 E. Zorra	15			1		
	C. W. Milburn	I	3	U21 Blenheim	11			1		
	W. W. Hannah	I	3	24 Blenheim	10			1		
	M. B. Hugill	II	2	5 Dereham	5				1	
	D. McK. Forrester,									
	B.A.	I	3	Embro Village	8			1		
	M. Alberta Robinson	II	3	11 Blenheim	4				1	
	M. E. Ireton	II	1	4 E. Nissouri	3				1	
	Peel	A. M. Burchell	I	4	Bolton Village	37	1			
Louise E. McColl		II	1	12 Chinguaecousy.....	5			1		
Geo. E. Hudson		II	2	19 Toronto.....	4				1	
Cree Matthew		II	2	15 Caledon	3				1	
Perth	John B. Dunbar	I	3	Milverton Village..	15		1			
	S. C. Stoodley	II	1	8 Downie	8			1		
	Wm. Robertson	III	1	5 Elma	10			1		
	B. Hall Cowie	II	2	U4 Fullarton	5			1		
	W. J. Ferguson	II	1	U10 S. Easthope	7			1		
	Geo. Thompson	II	2	3 Mornington	5			1		
	J. L. Hart	III	1	3 Blanshard	4				1	
	Jas. Stewart	II	2	U2 Ellice	3				1	
	Hester Jickling	II	1	7 Elma	3				1	
	C. J. McKinnon	II	2	10 Elma.....	4				1	
	Samuel Sample	II	2	3 Fullarton	4				1	
	Maggie Huggins	II	2	U5 Logan	4				1	
	Peterboro	Sydney W. E. Hill.....	I	5	Lakefield Village	12		1		
		D. L. Somerville	II	4	Havelock Village	10		1		

APPENDIX E.—Continued.

Inspectorate.	Name of Principal and Degree.	Professional Certificate.	No. of Teachers.	Name of School.	No. of Pupils.	Class of School.			
						A	B	C	D
Prescott & Russell...	W. L. Summerby,								
	B.S.A.	III	2	5 Cumberland	9			1	
	C. M. Rowe	II	2	Rockland Village	8			1	
	S. A. Hitsman	I	3	2 Russell	9			1	
	A. May Sparling	II	2	2 Cumberland	5				1
Prince Edward	F. B. Clarke	I	2	7 Hallowell	12		1		
	Fred Adams	II	2	17 Hillier	12			1	
	J. E. Benson	II	1	2 Ameliasburgh	7				1
	J. M. Root	II	1	11 Ameliasburgh	4				1
	G. E. Smith	III	1	10 Sophiasburgh	5				1
Renfrew	Miss A. E. Colliver	III	1	12 Sophiasburgh	4				1
	Geo. D. Ralston	I	4	Eganville Village	11	1			
	Geo. B. Wood	II	2	7 Westmeath	7			1	
	Ida Lacy	II	1	3 Adamston	4				1
	Jessie Muir	II	1	7 Radcliffe	3				1
Simcoe E. and W. Muskoka	Lila Mackie	III	1	4 Ross	3				1
	Hattie Wallace	III	1	1 Stafford	3				1
	Archie Thomson	III	4	7 Medonte	5			1	
	Silverera Day	III	1	12 Medonte	6			1	
	Geo. Culbert	III	1	13 Oro	4				1
Simcoe N.	J. A. Gillespie	II	2	4 Medonte	4				1
	Sarah Preston	III	1	2 Medonte	3				1
	Mary Proudfoot	III	1	3 Stephenson	3				1
	Alex. McKee	I	13	Midland Town	30	1			
	Thos. A. Gowan	I	4	Creemore Village	10	1			
Simcoe S. W.	Ira E. Clark	I	4	5 Flos	24			1	
	Matthew Johnston	II	1	3 Sunnidale	7			1	
	Thos. Hindle	II	3	9 Vespra	5				1
	A. D. Campbell	III	1	8 Sunnidale	4				1
	J. A. Speers	I	6	*Alliston Town	62	1			
Simcoe S. W.	A. A. Merritt	I	4	*Beeton Village	22	1			
	W. L. Kidd	I	6	*Stayner Town	36	1			
	Thos. Elliott, M.A.	I	4	*Tottenham Village	53	1			
	Geo. A. Clark	I	4	*5 Essa	38	1			
	J. P. Cowles	III	2	7 Essa	12			1	
Simcoe S. W.	Neil Christie	III	2	3 Nottawasaga	13			1	
	Geo. Sutherland	II	2	14 Nottawasaga	10			1	
	Geo. L. Thompson	I	1	6 Essa	7				1
	John M. McGuire	II	2	10 Essa	8				1
	Annie Wallace	III	1	5 Innisfil	6			1	
Simcoe S. W.	Chas. Deering	II	2	10 Innisfil	7			1	
	Thos. Irwin	II	1	4 Tossorontio	7			1	
	Jennie Fife	II	1	1 Essa	3				1
	Roy Hamer	III	1	2 Essa	4				1
	Gertrude Steele	III	1	3 Essa	4				1
Simcoe S. W.	Gordon L. Fraser	III	1	4 Gwillimbury W.	4				1
	Eva Evans	II	1	5 Gwillimbury W.	4				1
	Libbie Evans	III	1	9 Gwillimbury W.	3				1
	Thos. Scott	II	1	4 Innisfil	4				1
	Robt. Little	II	1	6 Innisfil	3				1
Simcoe S. W.	Chas. Asquith	III	1	7 Innisfil	4				1
	W. J. Mackay	II	1	22 Nottawasaga	3				1
	Florence Owens	III	1	7 Nottawasaga	3				1
	Maggie Pollock	III	1	1 Nottawasaga	3				1
	R. M. MacPherson	III	1	13 Tecumseth	3				1
Simcoe S. W.	Herbert Schmieden-								
	dorf	III	1	14 Tecumseth	4				1

* Two Teachers doing Continuation Class work only.

APPENDIX E.—Continued.

Inspectorate.	Name of Principal and Degree.	Professional Certificate.	No. of Teachers.	Name of School.	No. of Pupils.	Class of School.			
						A	B	C	D
Simcoe, S.W.—Con.	Henry Willoughby	III	1	10 Tecumseth	3				1
	Geo. Wilson	II	1	5 Tossorontio	4				1
	Andrew Kidd	II	1	8 Tossorontio	4				1
Stormont	Jas. Froats	I	3	3 Finch	15	1			
	Edith M. Adams	I	3	14 Koxborough	8	1			
	Willis Sheets	II	2	3 Osnabruck	13			1	
	Clarence D. Bouck	I	3	4 Osnabruck	7				1
	Geo. S. Mattice	II	1	9 Osnabruck	6				1
	Maggie M. Robb	III	1	15 Osnabruck	6				1
Victoria E.....	Chas. Ramsay	I	5	Bobcaygeon Village..	20	1			
Victoria W.....	H. J. Case	I	2	Fenelon Falls Vil...	7			1	
	T. C. Birchard	II	2	U1 Bexley	7			1	
	Murray Wilson	II	2	Woodville Village	10				1
Waterloo	F. W. Thomas	II	4	Ayr Village	10			1	
	J. Corrigan	I	6	Elmira Village	14			1	
	P. H. Huyok	I	5	New Hamburg Vil...	7			1	
Welland	C. E. Hansell	II	4	Bridgeburg Village..	19		1		
	Jas. Kirkwood	I	3	Fort Erie Village	12		1		
	D. W. McKay	I	5	Port Colborne Vil...	15		1		
	A. W. Reavley, B.A.	I	3	11 Bertie	13		1		
	Elizabeth Notman	II	2	1 Humberstone	6			1	
	Edgar Farr	II	2	9 Pelham	6			1	
	Robert Gant	II	2	U3 Pelham	4				1
	Geo. A. Campbell	II	4	Drayton Village	22	1			
Wellington N... ..	J. H. Cunningham	I	8	Palmerston Town	26	1			
	John A. Gray	II	3	Clifford Village	14		1		
	Isabella J. Glenn	II	2	12 Maryboro	11		1		
	Margaret A. Smillie	II	1	6 Maryboro	4				1
	J. T. Curtis	II	2	2 Peel	3				1
	Lizzie C. Hawken	II	2	7 Peel	3				1
	Ernest L. Fuller	I	3	Erin Village	24	1			
	Wm. J. Greenaway	II	2	9 Eramosa	16		1		
Wentworth	W. F. McKenzie	II	1	3 Guelph	4				1
	Gilbert McEachern	II	1	4 Puslinch	4				1
	A. E. Wilcox	II	4	3 Saltfleet	17		1		
	Chas. H. Stuart	II	3	5 Ancaster	11			1	
	Lillie Raycraft	III	2	3 Barton	8			1	
	Hermann Jerome	II	2	2 Glanford	8			1	
	Robt. E. Jamieson	III	2	9 W. Flamboro	9			1	
	Mary C. Gilchrist	II	1	13 Beverly	3				1
York N.....	Laura Shannon	II	2	3 Binbrook	4				1
	Annie Kenyon	III	1	5 Binbrook	4				1
	Janet Gilchrist	II	2	10 W. Flamboro	7				1
	Waldon Lawr	I	3	13 E. Gwillimbury.....	23	1			
	T. H. McGuirl	I	3	14 King	14	1			
	Dun. A. Carmichael	III	4	Woodbridge Village.	27		1		
	Jas. Hand	II	4	Stouffville Village	4				1
Rainy River and	J. W. Walker	II	3	3 Fort Frances Town	10			1	
Thunder Bay	D. M. Christie	I	4	Bruce Mines Town...	35	1			
Algoma	H. F. Brackenridge	I	4	1 Cobden	11		1		
	Wm. Argue	II	4	Thessalon Town	11		1		
	Miss F. Byrch	II	1	2 Thessalon	3				1
Manitoulin, etc... ..	R. O. White	I	4	Gore Bay Town	28	1			
	E. S. Fleming	II	4	Little Current Town	10		1		
	Jane Lush	II	1	1 Hilton	3				1
Nipissing, etc... ..	A. W. Smith	I	4	Sturgeon Falls Town	12			1	
	J. G. Lowe	I	4	Sudbury Town	14			1	
	W. M. Bradley	I	7	Copper Cliff Town...	4				1

APPENDIX E.—*Concluded.*

Inspectorate.	Name of Principal and Degree.	Professional Certificate.	No. of Teachers.	Name of School.	No. of Pupils.	Class of School.			
						A	B	C	D
Parry Sound W.....	A. M. Currie	I	13	*Parry Sound Town..	54	1			
	John Hemphill	I	5	Burk's Falls Village	22	1			
	P. J. McNaughton	II	2	U1 Chapman	7			1	
	Angus Black	III	1	1 Humphrey	6				1
R. C. Bilingual Schools, E. Ontario	John Laing	III	1	8 Perry	4				1
	Sr. St. Odile		7	Rockland Village ..	11			1	
	Sr. St. Radegonde		3	15 Gloucester	12			1	
R. C. Sep. Schools, E. Ontario	Sr. Ermstine		4	Eganville	21	1			
	Sr. St. Andrew		4	4 N. Crosby	31		1		
R. C. Sep. Schools, Central Ontario...	Jas. E. Jones	I	5	Mattawa Town	8				1
	Sr. Gertrude		4	Sudbury Town	3				1
	Thos. P. Hart	II	2	3 Mara	3				1
R. C. Sep. Schools, W. Ontario	Sr. M. Ethelbert		5	Amherstburg Town..	21	1			
	Julia O'Connor	III	2	2 Ashfield	5			1	
	Mary E. Benn	II	1	4 Biddulph	5			1	
	Annie Begley	II	1	5 Raleigh	5			1	
	Anna F. Flynn	II	1	6 Raleigh	5			1	
	Annie Noonan	II	1	6 Arthur	3				1
	Mary Troy	III	1	1 W. Wawanosh	3				1
Totals 1903-4					4,598	68	45	118	188
Totals 1902-3					4,864	65	48	134	233
Increase						3			
Decrease					266		3	16	45

* Two Teachers doing Continuation Class work only.

APPENDIX F.

ADMISSION OF CANDIDATES TO COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

Name of School.	Entrance Examination, June, 1904.		Name of School.	Entrance Examination, June, 1904.	
	Examined.	Passed.		Examined.	Passed.
Collegiate Institutes.			High Schools.		
Aylmer.....	93	57	Brighton.....	23	20
Barrie.....	112	78	Caledonia.....	42	36
Brantford.....	216	144	Campbellford.....	69	57
Brockville.....	106	90	Carleton Place.....	65	51
Chatham.....	154	177	Cayuga.....	50	34
Clinton.....	72	46	Colborne.....	27	24
Cobourg.....	74	56	Cornwall.....	109	77
Collingwood.....	91	61	Deseronto.....	36	32
Gallop.....	134	122	Dundas.....	49	43
Goderich.....	95	87	Dunnville.....	75	45
Guelph.....	155	133	Dutton.....	65	48
Hamilton.....	555	486	East Toronto.....	50	32
Ingersoll.....	95	65	Elora.....	24	19
Kingston.....	217	184	Essex.....	51	33
Lindsay.....	111	89	Fergus.....	79	60
London.....	357	377	Forest.....	55	35
Morrisburg.....	83	47	Fort William.....	47	36
Napanee.....	100	81	Gananoque.....	84	50
Niagara Falls.....	100	81	Georgetown.....	54	39
Ottawa.....	420	363	Glencoe.....	64	49
Orillia.....	98	81	Gravenhurst.....	58	36
Owen Sound.....	180	134	Grimsby.....	31	31
Perth.....	93	74	Hagersville.....	70	50
Peterborough.....	168	121	Harriston.....	25	21
Renfrew.....	116	78	Hawkesbury.....	37	23
Ridgetown.....	77	42	Irvington.....	68	32
St. Catharines.....	85	71	Kemptville.....	75	49
St. Mary's.....	130	95	Kincardine.....	78	57
St. Thomas.....	191	135	Leamington.....	69	35
Sarnia.....	161	127	Listowel.....	95	8
Seaford.....	64	52	Lucan.....	93	73
Stratford.....	202	140	Maddox.....	50	39
Strathroy.....	108	75	Markham.....	99	91
Toronto (Harbord St.).....	426	344	Meaford.....	67	52
" (Jameson Ave.).....	263	213	Michell.....	58	52
" (Jarvis St.).....	267	278	Mount Forest.....	59	48
Toronto Junction.....	130	83	Newburgh.....	55	75
Vankleeck Hill.....	80	45	Newcastle.....	15	9
Whitby.....	74	62	Newmarket.....	54	44
Windsor.....	164	115	Niagara.....	25	21
Woodstock.....	193	158	Niagara Falls South.....	30	25
High Schools.			North Bay.....	42	35
Alexandria.....	76	38	Norwood.....	50	35
Almonte.....	59	44	Oakville.....	71	54
Arnprior.....	50	41	Omeme.....	22	19
Arthur.....	39	29	Orangeville.....	57	36
Atterton.....	95	70	Oshawa.....	88	75
Aurora.....	73	58	Paris.....	59	51
Brimley.....	24	17	Parkhill.....	92	59
Bellefleur.....	187	123	Pembroke.....	115	65
Berlin.....	177	151	Petrolia.....	84	52
Bowmanville.....	52	46	Pictou.....	151	99
Bradford.....	53	46	Port Arthur.....	35	33
Brampton.....	74	54	Port Dover.....	26	23
			Port Elgin.....	37	33
			Port Hope.....	72	60

APPENDIX F.--Continued.

ADMISSION OF CANDIDATES TO COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

Name of School.	Entrance Examination, June, 1904.		Name of School.	Entrance Examination, June, 1904.	
	Examined.	Passed.		Examined.	Passed.
High Schools.			Other Places.		
Port Perry.....	71	57	Bobcaygeon.....	35	30
Port Rowan.....	43	32	Bolton.....	37	24
Prescott.....	75	53	Bothwell.....	48	37
Rat Portage.....	57	39	Bowesville.....	12	7
Richmond Hill.....	63	53	Bracebridge.....	48	42
Sault Ste. Marie.....	84	49	Bridgeburg.....	38	24
Simcoe.....	92	72	Brigden.....	23	13
Smith's Falls.....	81	75	Brussels.....	30	22
Smithville.....	30	21	Burford.....	37	29
Stirling.....	48	29	Burgessville.....	21	18
Streetsville.....	23	16	Burk's Falls.....	47	31
Sydenham.....	66	46	Burlington.....	28	26
Thorold.....	22	21	Burritt's Rapids.....	14	11
Tillsonburg.....	58	47	Cannington.....	36	26
Trenton.....	65	57	Cardinal.....	32	20
Uxbridge.....	71	61	Carp.....	39	25
Vienna.....	44	18	Castleton.....	11	9
Walkerton.....	76	64	Catawaqui.....	23	15
Wardsville.....	24	18	Chapleau.....	7	6
Waterdown.....	46	43	Charleston.....	37	25
Waterford.....	63	51	Chatsworth.....	28	20
Watford.....	72	42	Chesley.....	47	37
Welland.....	55	38	Chesterville.....	44	26
Weston.....	68	56	Churchill.....	23	19
Warton.....	47	42	Claremont.....	19	18
Williamstown.....	48	29	Clifford.....	12	8
			Cobden.....	43	27
			Comber.....	21	10
			Cookstown.....	35	30
			Copper Cliff.....	16	11
			Court right.....	19	13
			Creemore.....	22	7
			Crediton.....	19	11
			Crosshill.....	32	24
			Cumberland.....	43	23
			Delhi.....	40	35
			Delta.....	43	25
			Dickinson's Landing.....	31	19
			Dorchester Station.....	41	30
			Drayton.....	31	27
			Dresden.....	58	51
			Drumbo.....	24	17
			Dryden.....	7	6
			Dundalk.....	37	17
			Dungannon.....	42	34
			Durham.....	90	61
			Eganville.....	66	54
			Eglinton.....	41	23
			Elmira.....	25	21
			Elmvale.....	49	26
			Embro.....	45	39
			Erin.....	45	38
			Exeter.....	68	61
			Fenelon Falls.....	44	35
			Finch.....	70	42
Other Places					
Aberfoyle.....	27	24			
Acton.....	30	20			
Alliston.....	57	41			
Alvinston.....	51	34			
Ameliasburg.....	38	28			
Amherstburg.....	45	31			
Ancaster.....	35	26			
Angus.....	19	8			
Apsley.....	3	2			
Arkona.....	29	16			
Ashton.....	11	10			
Aultsville.....	44	22			
Avenmore.....	47	33			
Ayr.....	10	8			
Baileboro'.....	13	12			
Bancroft.....	34	20			
Bath.....	45	30			
Belle River.....	27	9			
Beaverton.....	29	21			
Beeton.....	17	15			
Belmont.....	33	25			
Be'hany.....	24	15			
B'nbrook.....	27	17			
Blackstock.....	17	13			
B'enheim.....	79	56			
Blyth.....	36	26			

APPENDIX F.--Continued.

ADMISSION OF CANDIDATES TO COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

Name of School.	Entrance Examination, June, 1904.		Name of School.	Entrance Examination, June, 1904.	
	Examined.	Passed.		Examined.	Passed.
Other Places.			Other Places.		
Pingal.....	66	57	Midland.....	31	20
Flesherton.....	46	30	Mildmay.....	13	9
Florence.....	26	15	Millbrook.....	33	15
Fordwich.....	18	14	Milton.....	65	59
Port Frances.....	24	17	Milverton.....	43	41
Galetta.....	22	18	Minden.....	19	15
Glen Allan.....	8	8	Moorefield.....	13	7
Gore Bay.....	15	11	Mount Albert.....	20	12
Grand Valley.....	23	18	Mount Hope.....	17	10
Hall's Bridge.....	5	3	Newboro'.....	38	18
Hanover.....	32	20	New Hamburg.....	30	26
Harrow.....	29	23	Neustadt.....	4	4
Hastings.....	13	13	New Liskeard.....	10	9
Havelock.....	14	7	North Augusta.....	11	4
Hensall.....	35	25	North Gower.....	28	15
Highgate.....	2	27	North Lancaster.....	25	14
Hilldale.....	35	21	Norwich.....	30	20
Hintonburgh.....	53	35	Oakwood.....	13	12
Horning's Mills.....	11	9	Old Springs.....	31	22
Huntsville.....	31	22	Oronq.....	29	23
Janetville.....	21	14	Otterville.....	18	14
Janeville.....	15	13	Paisley.....	58	30
Jarvis.....	30	25	Pakenham.....	27	17
Jasper.....	24	15	Palme's on.....	35	25
Keene.....	32	20	Parry Sound.....	49	26
Kilmaurs.....	9	7	Pelee Island.....	2	0
Kimberley.....	20	14	Pelham S. S. No 2.....	31	22
Kingsville.....	19	17	Penetanguishene.....	31	15
Kintail.....	31	27	Plantagenet.....	24	11
Kirkfield.....	14	11	Plattsville.....	36	27
Lakefield.....	40	23	Port Colborne.....	36	33
Lanark.....	61	37	Port Stanley.....	15	9
Lancaster.....	20	15	Princeton.....	20	18
Laurel.....	11	2	Powassan.....	42	30
Lion's Head.....	15	9	Queensville.....	18	7
Little Current.....	15	11	Randwich.....	13	10
Little Britain.....	27	24	Rainy River.....	6	4
London East.....	134	103	Riceville.....	26	12
Lucknow.....	36	28	Richard's Landing.....	3	3
Magnetawan.....	11	9	Richmond.....	36	22
Manitowaning.....	9	3	Ridgeway.....	23	18
Manotick.....	17	10	Ripley.....	23	19
March Corners.....	5	3	Rockton.....	31	23
Markdale.....	35	29	Rockwood.....	38	27
Ma mora.....	25	19	Rodney.....	25	14
Marshville.....	24	10	Rosemont.....	15	12
Markerville.....	10	6	Roseneath.....	9	6
Marsville.....	12	5	Russell.....	34	19
Massey Station.....	24	10	St. George.....	13	11
Mattawa.....	23	5	St. Helen's.....	37	29
Maxville.....	56	28	Sandwich.....	48	23
Merivale.....	9	5	Schomberg.....	9	6
Meilin.....	29	25	Schreiber.....	5	5
Merrickville.....	33	22	Selkirk.....	26	25
Merritton.....	35	25	Sharbot Lake.....	36	22
Metcalfe.....	35	25	Shelburne.....	48	35
			Southampton.....	24	20

APPENDIX F---*Concluded.*

ADMISSION OF CANDIDATES TO COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

Name of School.	Entrance Examination, June, 1904.		Name of School.	Entrance Examination, June, 1904.	
	Examined.	Passed.		Examined.	Passed.
Other Places.			Other Places.		
Sou h Mountain.....	42	19	Wellington.....	37	9
Sparta.....	24	17	West Lorne.....	32	25
Spencerville.....	21	16	West Osgoode.....	17	12
Springfield.....	36	20	Westport Separate School..	39	25
Stayner.....	54	52	Wincaster.....	79	50
Stoney Creek.....	33	28	Wheat ey.....	20	17
Strabane.....	40	27	Wilkesport.....	26	13
Sturgeon Falls.....	28	7	Wingham.....	46	38
Sudbury.....	17	12	Woodbridge.....	23	17
Sutton West.....	23	17	Woodville.....	24	21
Tamworth.....	41	25	Wolfe Island.....	27	19
Tara.....	33	19	Wooler.....	25	14
Tavistock.....	16	13	Wroxeter.....	18	15
Tecumseh.....	11	3	Wyoming.....	38	26
Teeswater.....	33	26	Zephyr.....	10	8
Thamesville.....	39	29	Zurich.....	26	20
Thedford.....	21	14			
Thessalon.....	38	17	Summary :		
Thornbury.....	50	17	Collegiate Institutes.....	6,795	5,287
Tilbury.....	44	38	High Schools.....	5,812	4,338
Tiverton.....	29	17	Other Places.....	7,167	5,637
Tottenham.....	41	32			
Tweed.....	53	38	Grand total.....	19,774	14,632
Uptergrove.....	32	24			
Varna.....	18	14	Comparison with June, 1903:		
Wallaceburg.....	42	34	Increase.....	716	1,629
Warkworth.....	30	24			
Waubauskene.....	59	38			

APPENDIX G.—FREE TEXT BOOKS IN RURAL SCHOOLS, 1904.

Inspectorate.	Name of school (section number and township) and amount expended for text books.	Total amount expended.	Total amount of Legislative aid.
		\$	\$
Hastings N.....	6 Faraday, \$7.85.....	7 85	3 92
Lanark.....	4 Lanark, \$9.70; Ramsay, \$17 50.....	27 20	13 60
Middlesex W.	6 E. Williams, \$16.67.....	16 67	8 34
Rainy River & Thunder Bay.	3 Paipoonge, \$21.50.....	21 50	10 75
Wentworth.....	8 Barton, \$12.68.....	12 68	6 34
York S.....	20 York, \$17.11.....	17 11	8 55
Totals	7 schools.....	103 01	51 50

APPENDIX H.—PROCEEDINGS FOR THE YEAR 1904.

I. REGULATIONS AND CIRCULARS.

Regulations of the Education Department, Approved August, 1904.

PUBLIC SCHOOLS.*Sites and School Houses.*

1. The site of every Public School shall admit of easy drainage and shall be accessible by the best highways in the section. Its area shall be not less than half an acre, and if the school population of the section exceeds seventy-five, the area shall be not less than one acre. The grounds shall be levelled and drained, enclosed by a neat and substantial fence and planted with shade trees. The school house shall be placed at least thirty feet from the public highway.

2. There shall be a well or other means for procuring water, so placed and guarded as to be secure against pollution from surface drainage or in any other way. Every rural school shall be provided with a woodshed.

3. The closets for the sexes shall be under different roofs. They shall be separated by a high, close board fence, their entrances screened from observation, and locked after school hours. They shall be properly cleansed and disinfected when necessary and approached by proper walks from the school house so as to be accessible with comfort at all seasons of the year.

4. Where the average attendance of any section for three years exceeds fifty pupils, a school house with two rooms shall be provided. An additional room and teacher shall be required for each additional fifty pupils in average attendance. Every school house shall afford separate entrances with covered porches and suitable cloak rooms for boys and girls.

5. Every school room shall contain a superficial area of at least twelve square feet and a cubic content of at least 250 feet for each pupil in average attendance. A uniform temperature throughout the room of at least sixty-eight degrees shall be maintained and provision made for a complete change of atmosphere three times every hour. The windows—both sashes—shall be adjusted by weights and pulleys and provided with suitable blinds. Light, where possible, shall be admitted from the left of the pupil.

Furniture and Equipment.

6. Every school house shall be seated with either double or single desks—single desks being preferred. The desks shall be fastened to the floor in rows facing the teacher's platform, with suitable aisles between the rows and with passages at least three feet wide between the outside rows and the walls of the school room. Desks according to the following scale shall be considered as meeting all legal requirements:

Age of pupils.	Seats.			Desks.			
	Height.		Slope of back.	Length.		Width.	Height next pupil.
	Front.	Rear.		Double.	Single.		
Five to eight years	11 in.	10½ in.	2 in.	36 in.	18 in.	12 in.	22 in.
Eight to ten years.....	12 "	11½ "	2 "	36 "	18 "	12 "	23 "
Ten to thirteen years	13 "	12½ "	2½ "	36 "	20 "	13 "	24 "
Thirteen to sixteen years	14 "	14½ "	3 "	40 "	22 "	13 "	26 "

7. There shall be one blackboard at least four feet wide, extending across the room in rear of the teacher's desk, with its lower edge not more than two and a half feet above the floor or platform; and, when possible, there shall be an additional blackboard on each side of the room. At the lower edge of each blackboard there should be a trough five inches wide for holding crayons and brushes.

NOTE.—The following directions for making a blackboard may be found useful:—

(a) Where a brick wall is built solid, and also in case of frame buildings, the part to be used for a blackboard should be lined with boards, and the laths for holding the plaster nailed firmly on the boards.

(b) The plaster for the blackboard should be composed largely of plaster of Paris.

(c) Before and after having received the first coat of color it should be thoroughly polished with fine sand paper.

(d) The coloring matter should be laid on with a wide, flat varnish brush.

(e) The liquid coloring should be made as follows:—Dissolve gum shellac in alcohol, four ounces to the quart; the alcohol should be ninety-five per cent. strong; the dissolving process will require at least twelve hours. Fine emery flour with enough chrome green or lampblack to give color, should then be added until the mixture has the consistency of thin paint. It may then be applied in long, even strokes, up and down, the liquid being kept constantly stirred.

8. Every school shall have at least one globe not less than nine inches in diameter, properly mounted; a map of Canada; a map of Ontario; a map of the World and of the Continents; one or more sets of Tablet lessons of Part I. of the First Reader; a standard Dictionary; a Gazetteer; a numeral frame; a suitable supply of crayons and blackboard brushes; an eight-day clock; shelving for baskets; hooks for caps and cloaks; and two chairs in addition to the teacher's chair.

9. The Trustees shall appoint one of their number or some suitable person to keep the school house and premises and all fences, outhouses, walks, windows, desks, maps, blackboards, and stoves in proper repair. They shall also provide for whitewashing walls and ceilings if finished in plaster, (or for washing if finished in wood), every year during the summer holidays, and shall employ a caretaker whose duty it shall be to sweep the floors daily, and wash them at least quarterly, and to make fires one hour before the opening of school, from the first of November until the first of May in each year.

10. No public school house or school grounds, unless otherwise provided for in the conveyance of the trustees, shall be used for any other than

Public School purposes without the consent of the trustees, and no advertisements shall be posted in any school room or distributed to the pupils unless approved in the same way.

11.—(1) The first Friday in May each year shall in rural school sections and in incorporated villages be devoted to planting shade trees, making flower beds, and otherwise beautifying and improving the school grounds. Songs and recitations designed to cultivate greater interest in trees and flowers and in the study of nature shall form part of the exercises for the day.

(2) Empire day, the first school day before the 24th of May, shall be duly celebrated in each school. The forenoon is to be devoted to a study of the greatness of the British Empire and the afternoon to public addresses, recitations, music, etc., of a patriotic character.

Duties of Pupils.

12. Every pupil registered in a Public School shall attend punctually and regularly every day of the school year in which his name is so registered. He shall be neat and cleanly in his person and habits, diligent in his studies, kind and courteous to his fellow pupils, obedient and respectful to his teacher, and shall submit to such discipline as would be exercised by a kind, firm, and judicious parent.

13. Every pupil on returning to school after absence from any cause shall give orally or in writing to the teacher, a proper reason for his absence. A pupil may retire from school at any hour during the day at the request, either oral or written, of his parent or guardian. A pupil may be suspended who fails or neglects to provide himself with the text books or other supplies required in his course of study, or to pay the fees imposed for such purpose by the trustees.

14. Every pupil shall be responsible to the teacher for his conduct on the school premises or on the way to or from school, except when accompanied by his parents or guardian or by some person appointed by them on their behalf. Any pupil who injures or destroys school property or furniture may be suspended until the property or furniture destroyed or injured is made good by the parent or guardian of such pupil.

School Terms and Organization.

15. Unless otherwise directed by the Trustees, the pupils attending every Public School shall assemble for study at nine o'clock in the forenoon, and shall be dismissed not later than four o'clock in the afternoon. One hour at least shall be allowed for recreation at mid-day, and ten minutes during the forenoon and afternoon terms, but in no case shall the hours of study be less than five hours per day including the recess in the forenoon and afternoon, provided always the Trustees may reduce the hours of study for the pupils in the First and Second Forms.

16. Pupils not registered in a Day School may attend a Night School from the 1st of October until the 31st of March. The hours of study in the Night School shall not exceed 2½ hours per session. Pupils shall not be admitted to a Night School who are under fourteen years of age or who attend

school during the day. Night Schools shall be subject to the same regulations as Public Schools, with respect to the discipline of pupils, the duties and qualifications of teachers, and the use of text-books.

17. (1) The course of study for Public Schools shall be taken up in five Forms as hereinafter set forth, and pupils shall be classified by the teacher with respect to their attainments in all the subjects of the Form to which they are assigned or from which they are to be promoted.

(2) The amount of time to be given to any class is to be determined by the teacher, who shall be guided in this matter by the inspector.

(3) Pupils who have passed the High School Entrance examination and such other pupils as are considered qualified by the teacher and Inspector shall be entitled in both rural and urban schools to receive instruction in the subjects of the Fifth Form, provided that in a municipality having a High School, if resident pupils of the High School are not charged fees for the first year, it will not be deemed obligatory for the Public School Board to have a Fifth class.

18.—(1) All the subjects prescribed for Forms I-IV of the Public School course are obligatory, except where otherwise specified in the programme of studies. No deviation from this rule is permissible without the concurrence of the inspector, who shall also decide as to the optional subjects.

(2) The following subjects of the Fifth Form course of study are obligatory: Reading, Literature, Grammar, Composition, History, Geography, Writing, Arithmetic and Mensuration, and Elementary Science. From the other subjects of this Form, Boards of Trustees may select, with the concurrence of the Inspector, such subjects or such parts of the courses therein, as may, in their judgment, suit the requirements of their localities.

(3) When from any cause, teachers properly prepared to teach the courses in Art, Constructive work, Clay Modelling, Elementary Science, and Nature Study are not available, the Inspector shall authorize such modifications of the courses in these subjects as he may deem expedient.

(4) Classes in Latin, Greek, French or German may be provided in Fifth Forms or Continuation classes, with the concurrence of the Inspector, and with a time table approved by him. Teachers of these subjects shall hold at least a second class certificate and have passed a Departmental or a university examination in the language they undertake to teach.

19. In school sections where the French or the German language prevails, the Trustees may, in addition to the course of study prescribed for public schools, require instruction to be given in Reading, Grammar, and Composition to such pupils as are directed by their parents or guardians to study either of these languages, and in all such cases the authorized text-books in French or German shall be used. But nothing herein contained shall be construed to mean that any of the text-books prescribed for Public Schools shall be set aside because of the use of the authorized text-books in French and German.

Continuation Classes.

20.—(1) Under the provisions of The Public Schools Act, the course of study for Continuation Classes shall include the subjects prescribed for the Lower School of the High Schools (the former first and second forms). More

advanced work of the High Schools may be taken up if requested by the Trustees and approved by the Public School Inspector.

(2) There will be four grades of Continuation Classes, viz:—(a) Schools in which the Principal holds a First Class Certificate (unless occupying the position continuously since April, 1899); (b) Schools in which there are at least two teachers and a class in regular attendance of at least ten pupils who have passed the High School Entrance examinations; Schools (c) in which there are at least five; and (d) in which there are at least three who have passed the High School Entrance examination, and are in regular attendance. In Class (a) the Principal shall give regular instruction only to pupils of Form V or to those doing higher work. In the other classes, the teachers shall have such qualifications as are approved by the Public School Inspector.

(3) No grant will be paid for a Continuation Class unless the Inspector reports that the obligatory subjects, whether prescribed for examination purposes or not, have received proper attention. The grant will be paid according to the nature and extent of the work done, and not on the results of examinations. In order that a school may obtain the grant, it will be necessary that the minimum number of pupils be enrolled during each month of the full academic year ending in June.

21.—(1) Public or Separate School Continuation Classes, of the highest grade [Reg. 20, (2), (a)] which undertake the preparation of candidates for any part of the District or the Junior or Senior non-professional examination for Public School teachers and which comply with the High School Regulations as regards equipment and the programme and time-table of studies, shall be subject to the same examination regulations and entitled to the same examination privileges as are the High Schools.

(2) When a class is organized in a Public or a Separate School for the preparation of candidates for any grade of teachers' non-professional certificates, the Principal shall forward to the Inspector concerned, for his approval, at once and thereafter and as often as the Inspector may direct, a report showing the qualifications of the teacher or teachers, the names of all the members of the class, with their age and standing, the courses and the time-table proposed, and a list of the equipment of the school (apparatus, library, drawing models, maps, etc.).

NOTE.—In Reg. 34 is specified the value of the equipment necessary for each grade of High Schools. On application to the Education Department a list may be obtained of the apparatus suitable for the different science courses of the Lower, Middle, and Upper Schools. The amount of the equipment required in the case of each class of schools is at the discretion of the Inspector; but, from the first, sufficient apparatus should be provided to enable the teacher to perform the most important experiments with the help of the pupils. The Inspector should also require each board to add to the equipment from year to year, so that, as soon as possible, work may be done in Physics, Chemistry, and Mineralogy, by the pupils individually or in groups of four at most. The work in Biology shall always be practical.

Programme of Studies.

22. Subject to any instructions issued by the Minister of Education from time to time, the requirements of each Form in the Public School shall be as set forth in Schedule I—Public School Programme of Studies.

High School Entrance Examinations.

23.—(1) At every High School and Collegiate Institute and such other places as may be recommended by the County Council, an examination to be known as the High School Entrance examination to be conducted in the subjects prescribed for the Fourth Form of Public Schools, shall be held annually on examination papers prepared by the Education Department. The answer papers shall be read by the Board of Examiners constituted under The High Schools Act.

(2) Every candidate shall notify the Public School Inspector concerned, before May 1st, of the examination centre at which he purposes to write.

(3) The Entrance Boards of Examiners for a city may, however, with the approval of the High School Board concerned, prepare examination papers in lieu of those prepared by the Education Department, but such papers shall be on the same subjects, and the same scheme, and the same standard for passing shall be required; *or*, with the concurrence of the Boards in charge of the High, Public, and Separate Schools concerned, such Board of Examiners, instead of holding an examination itself, may admit pupils on the recommendation of the Public or Separate School Principal; but, in all such cases the Board of Examiners shall satisfy itself that all the subjects of Parts I. and II. have been satisfactorily completed before admission is granted.

24. The County Council may impose a fee not exceeding one dollar upon each county pupil writing at the Entrance Examination. Boards of Trustees may impose similar fees upon resident and non-resident pupils writing on the Entrance Examination at High Schools and Collegiate Institutes; but such fees shall not be imposed where the Board of Trustees authorizes the promotion of pupils to the Fifth Form of the Public Schools without passing the Entrance Examination.

25.—(1) The subjects of admission to the High Schools shall be those prescribed for the fourth form of the Public Schools, as follows:

Part I.—Literature, History, Art, Physiology and Hygiene, Nature Study.

Part II.—Reading (written and oral), Writing, Spelling, Geography, Grammar, Composition, Arithmetic.

(2) The literature of Part I. shall embrace the careful reading during the previous year of at least four suitable works selected by the Principal for each pupil, from a list in supplementary reading in English literature prepared by the Public School Inspector.

(3) The written examination in Reading will be based on sight passages, and will be designed as a test of the candidate's understanding of what he reads. The candidate's knowledge of the selections for memorization will also, as heretofore, be tested on this paper.

26.—(1) No candidate from a Public or Separate School shall be admitted to the examination in the subjects of Part II. who has not been reported by the Principal to the Public School Inspector, on or before June 15th., as having completed satisfactorily the courses in the subjects of Part I. At the same time a confidential report from the teacher or staff as to the standing of

their candidates, may also be submitted to the Public School Inspector for the consideration of the Entrance Board.

(2) When a candidate has not been prepared in a Public or Separate School, the Public School Inspector shall admit him to the Examination for Part II., and shall report the circumstances to the Entrance Board, which will deal with such case as it may deem expedient.

(3) At his official visits to each school, the Public School Inspector shall satisfy himself as to the efficiency of the provision for carrying out sub-section 1 preceding, and, without his approval of the school, the certificate for Part I. shall not be accepted by the Entrance Board.

27.—(1) The marks allotted in the Entrance Examination will be apportioned as follows:—Reading (oral), Writing, Spelling, each 50; Reading (written), Grammar, Composition, Geography, Arithmetic, each 100. Two marks shall be deducted for each misspelled word in the spelling paper, and reasonable deductions may be made for misspelling in the other papers. Deductions may be also made for want of neatness.

(2) Any candidate who obtains 40 per cent. of the marks in each subject and 60 per cent. of the aggregate marks shall be considered as having passed the examination. The examiners may also award pass standing to candidates who have not made a bad failure in any subject but who have made a high aggregate above the total required, or to other candidates for admission whose cases demand special consideration.

(3) The decision of the Board of Examiners shall be final with regard to the admission or rejection of any candidate, but the Inspector may submit to the Board for re-consideration the complaint of any candidate or any other person with regard to the examination.

28. In the interval between examinations, a pupil who has been prepared on a different course in another province or country, or a pupil who was unable to attend the Entrance examination, may be admitted temporarily to a High School by the Principal, with the concurrence of the Public School Inspector, if in their judgment, he is able to take up the work of the High School. A report showing the age and attainments of such pupil, with the reasons for his admission, and signed by the Principal and Public School Inspector, shall be submitted to the Entrance Board at its next meeting. The Board shall then finally dispose of the case, and shall include the entrant's name in its report at the next annual examination.

Leaving Examinations.

29.—(1) Public School Leaving Examinations may be held annually in every Public School, having a fifth form, under the direction of the Principal, who shall consult the Inspector regarding the character and scope of such examinations. The preparation of the questions and the examination of the answer papers are to be left to the Principal, but subject to the advice of the Inspector. Pupils who thus complete satisfactorily the work of the fifth form may be awarded Public School Leaving certificates signed by the Inspector.

(2) These examinations shall be mainly of such a character as will show to the satisfaction of the Inspector that proper attention has been given to the subjects of the programme. No Public School Leaving certificate shall be granted by the Inspector unless satisfactory attention has been given to the subjects of Parts I. and II. prescribed for the High School Entrance examination.

(3) The Board of Examiners for High School Entrance may accept such certificates for admission to a High School.

HIGH SCHOOLS AND COLLEGIATE INSTITUTES.

Accommodations and Equipment.

30.—(1) The plans and site of every High School hereafter erected or remodelled shall be subject to the approval of the Minister of Education.

(2) In all High Schools established since July, 1891, or to be hereafter established, there shall be a Principal and at least two assistants.

(3) No new High School shall be entitled to receive any grant that does not provide at least the amount fixed by the instructions of the Minister of Education with regard to accommodations and the equipment recognized as the maximum in distributing the Legislative grant to schools with two masters.

31.—(1) Any High School may be raised to the status of a Collegiate Institute when it is shown to the satisfaction of the Education Department that the trustees have provided: (a) adequate school buildings; (b) equipment of the value and character recognized as the maximum in the case of High Schools with three or more masters; (c) four specialists, viz., one in Classics, one in Mathematics, one in Science, one in Moderns and History (one of whom or some other member of the staff being a Commercial specialist and one an Art specialist); and (d) such other Assistants as will secure thorough instruction in all the subjects of the High School course as far as Senior Matriculation into the University of Toronto.

(2) A Collegiate Institute may be reduced to the rank of a High School on the joint report of the High School Inspectors, approved by the Education Department.

32. Every High School that complies with the Regulations of the Education Department shall be entitled to the following grants: (a) a fixed grant of \$375; (b) in respect of school accommodation, a maximum of \$100 in the case of High Schools with two masters and of \$150 in the case of High Schools with three or more masters; (c) in respect of equipment, ten per cent. of the total approved expenditure but so as not to exceed \$160 in the case of High Schools with two masters or \$320 in the case of High Schools with three or more masters; (d) in respect of salaries ten per cent. of the approved expenditure over \$1,500 but so as not to exceed \$600; (e) such amount *pro rata* in respect of average attendance as may remain unexpended of the grant.

33. Every Collegiate Institute that complies with the Regulations of the Education Department shall be entitled: (a) to a fixed grant of \$375; (b) to a grant in respect of equipment of \$320; (c) to a grant in respect of school

accommodation of \$200; (d) to ten per cent. of the approved expenditure on salaries over \$1,500 but so as not to exceed \$600; and (e) to a grant on the basis of average attendance out of any unexpended balance of the Legislative grant.

34. In apportioning the Legislative grant on equipment, the maximum recognized in the case of High Schools with two masters shall be as follows: Library, \$300; Scientific Apparatus, \$300; Maps and Globes, \$50; Models for Drawing, \$50; Typewriters, \$100; Gymnasium, not including equipment, \$800. In the case of Collegiate Institutes and of High Schools with three or more masters the maximum recognized shall be: Library, \$600; Scientific Apparatus, \$600; Maps and Globes, \$100; Models for Drawing, \$100; Typewriters, \$200; Gymnasium, not including equipment, \$1,600.

35.—(1) The catalogue of the equipment shall be kept by the Principal of the School and shall be accessible to any officer of the Education Department.

(2) The instructions of the Minister of Education in the matter of grading shall be followed in appropriating the grant for school accommodations. See Reg. 149.

(3) No High School or Collegiate Institute shall be entitled to any Legislative grant on its gymnasium for any year in which the time prescribed in Reg. 41 for Drill Gymnastics and Calisthenics has not been provided.

(4) On the report of a High School Inspector such reductions may be made in the grants payable upon the equipment, the accommodations, and the salaries of the staff, as the Minister of Education may deem expedient.

Organization.

36.—(1) In every High School or Collegiate Institute the head teacher shall be called the Principal, and the other teachers Assistants.

(2) The authority of the Principal of the High School shall be supreme in all matters of discipline on the school premises where the Public and the High School occupy the same building.

(3) The provisions of the Public Schools Act, 1901, and the regulations of the Education Department with respect to the duties of pupils attending a Public School shall apply to teachers and pupils of High Schools.

37.—(1) The Principal of a High School or Collegiate Institute shall hold a Principal's Certificate and the Assistants shall hold High School Assistants' Certificates. Special teachers of Music, Art, Physical Culture, Manual Training, Household Science, and Agriculture shall possess qualifications satisfactory to the Minister of Education.

(2) If, after due advertisement, a High School Board is unable to obtain a legally qualified Assistant, a temporary certificate may be granted by the Minister of Education for the current half year to a suitable person on the application of the Board.

38.—(1) The Principal shall determine the number of pupils to be assigned to each form and the order in which the subjects in each form shall be taken up by the pupils.

(2) The Principal shall make such promotions from one form to another as he may deem expedient; he shall also assign the subjects of the course of study among the Assistants.

(3) No pupil once enrolled in a Secondary School (a High School, or a Public or a Separate School Continuation or Fifth Book Class) shall be admitted to another Secondary School unless he presents a letter of honorable dismission from the Principal of the Secondary School he last attended. In the event of a dispute, the parties thereto shall submit full particulars of the question for final settlement to the inspector of the school into which the pupil seeks admission.

Programme of Studies.

39.—(1) The courses of study in the High Schools shall be taken up in three main divisions: The Lower School, (a two or three years' course), the Middle School (a one or two years' course), and the Upper School (a one or two years' course). The Principal shall make such organization of forms as he may deem expedient.

(2) The High School Courses of study shall be organized as follows:

(a) The General Course; (b) The Commercial Course; (c) The Manual Training Course; (d) The Household Science Course; (e) The Art Course; (f) The Agricultural Course; (g) The Courses for University Matriculation and the Preliminary Examinations of the Learned Professions; (h) The Courses for Teachers' non-Professional Certificates.

NOTE.—The programme of studies has been prepared primarily for the general student; but it includes the work prescribed for University pass and honor matriculation, for the Teacher' non-professional examinations, and for the preliminary examinations of the learned professions.

(3) The Board of Trustees shall select the courses on the report of the Principal; but a course shall not be taken up if, on the report of the High School Inspector, the Minister of Education decides that the staff, the equipment, or the accommodations are inadequate therefor.

(4) The following subjects shall be obligatory on all pupils: The Lower School courses in geography, arithmetic and mensuration, English grammar, writing, reading, and physical culture, with the English composition, English literature, and history of the Lower and Middle Schools.

(5) Pupils in the general course shall take in addition, the Art and the Elementary Science of the Lower School, with such other subjects of the High School programme as may be agreed upon between the pupil's parent or guardian and the Principal of the school.

(6) Pupils in the special commercial, manual training, household science, art, and agricultural courses shall take the subjects that are obligatory on all pupils (see subsection (4) preceding), with such suitable modifications as may be deemed expedient by the Principal and approved by the Minister of Education.

(7) One of the courses prescribed in subsection (2) above and not more without the consent of the Principal, shall be taken by each pupil; but the

Principal may omit or curtail the course in any of the obligatory subjects in the case of individual pupils who are not preparing for examinations, and whose circumstances, in his judgment, deserve special consideration.

(8) Subjects begun in one school division and continued in the higher may be reviewed therein as the Principal may deem expedient.

(9) No subject prescribed for the Lower School alone shall be continued into the Middle or Upper School, but after March (and not before) the Principal may provide in the Middle School for the review of the courses in arithmetic and mensuration and English grammar prescribed for University junior matriculation and the preliminary examinations of the learned professions, and in the geography prescribed for the junior non-professional examination for teachers.

40. The following shall be the average minimum amount of time to be devoted each week to each of the following subjects, separately from the other subjects, in the courses where such subjects are obligatory:

(1) *Reading*.—Two lessons of thirty minutes each for two years in the Lower School, the average number of pupils in each class being not more than twenty-five and the time being increased or diminished when the average in the class is greater or less than twenty-five. In all the school sub-divisions, reading shall also be ~~taken~~ up systematically in connection with English literature.

(2) *Elementary Science*. A lesson of thirty minutes every day or the equivalent thereof, throughout each year of the Lower School.

41.—(1) The course in drill, calisthenics, and gymnastics is obligatory in Collegiate Institutes, and shall be taken up in lessons of thirty minutes each, three times a week, in each form of the Lower School.

(2) Provision for Physical Culture shall be made in the Middle and Upper Schools also, but the amount and the character of the provision are left to the discretion of the Principal.

(3) No pupil shall be exempted from the course in Physical Culture except upon a medical certificate or on account of evident physical disability or of other reason satisfactory to the Principal and approved by the High School Inspector. In all the forms the sexes shall be separately trained.

(4) During the months of May, June, September, October, and November, the Principal may substitute for drill, etc., such sports and games as he may approve.

(5) In High Schools having no gymnasium, drill and calisthenics shall be taken up at the discretion of the Principal as often as the weather, the accommodations, and the adequacy of the staff will permit; and gymnastics may be omitted.

42. The details of the courses of study in each Form in High Schools shall be as set forth in Schedule II—High School Programme of Studies.

EXAMINATIONS FOR TEACHERS' NON-PROFESSIONAL CERTIFICATES.

General.

43.—(1) (a) An examination for students intending to become teachers will be held annually by the Education Department, subject to the conditions hereinafter contained in the High School Programme of Studies at each High School and Collegiate Institute and at such other centres as may be approved.

(b) Candidates intending to write should make application to the Public School Inspector before the 24th of May on a form to be obtained from him.

(2) (a) At this examination there shall be three grades of teachers' non-professional certificates, viz.: District, Junior, and Senior.

(b) The examination subjects for the different grades are set forth in detail in Regulations 46, 47 and 48, and the different subjects are defined in the Lower, Middle, and Upper Schools, respectively, of the High School programme.

(c) One examination paper shall be set in each subject except in the case of Latin, Greek, French, and German, in which there shall be two papers—one in the authors and grammar and one in composition.

(d) Except the papers set in Latin, Greek, French and German, the papers set for the Junior and Senior Teachers' Non-professional Examinations, hereinafter defined, will be different from those set for University matriculation, and the examiners will be instructed to set papers suitable for candidates who desire to become teachers.

(e) At the examinations in English composition, an essay or a letter or both shall be required, to which special importance will be attached. Questions in Rhetoric may also be set at the Senior examination, but no candidate shall be passed who does not satisfy the examiners in composition.

(f) In addition to passages from the prescribed authors, sight passages shall also be set at the examinations in English Literature, Greek, Latin, French, and German.

(g) Every candidate for a teachers' non-professional certificate shall have read carefully during the previous year at least four suitable works in English Literature (both prose and poetry), approved by the Principal of the approved High, Public, or Separate School (Reg. 45), in which he has completed his course, or by other authority satisfactory to the Public School Inspector, in addition to those prescribed for the examination in English Literature.

(h) No practical examinations will hereafter be held by the Education Department as part of the departmental examinations in Science.

NOTE.—Graduation diplomas may be awarded by the different High and Public School Boards on such bases as each may determine. The joint University matriculation examinations will be conducted by the Education Department as heretofore or as the papers—university or departmental—that will meet the requirements of their preliminary examinations. The results of such examinations will be communicated to may be hereafter arranged, and the learned societies will have the privilege of selecting such bodies as heretofore by the Education Department.

(3) (a) Each examination paper shall be valued at 100. Candidates for District, Junior, and Senior standing will be required to make 60 per cent. of the aggregate marks prescribed for the examinations, as well as 40 per cent. on each paper. Seventy-five per cent. of the aggregate will be required for Honors.

(b) If, after all the answer papers are read, any examination paper should be found by the Board of Examiners, easier or more difficult than required, the minimum on the paper shall be correspondingly raised or lowered, and the total number of marks correspondingly increased or diminished.

(c) Each candidate who makes the required aggregate may be awarded a certificate, even though he should fail to obtain the minimum in a subject, provided he was regarded as fit to pass in that subject by the staff, as shown from the confidential report sent to the Department before the examinations.

(4) A candidate for Senior standing who has been duly admitted to the examination, shall be awarded a certificate on application to the Education Department of having secured Junior standing, notwithstanding his failure to obtain Senior standing, providing such candidate has obtained 40 per cent. of the marks at this examination in the subjects of both parts of the Senior examination.

(5) Candidates who fail at the Junior or the Senior examination, but who obtain a standing satisfactory to the County Board of Examiners, may be granted District non-professional certificates.

(6) The standing of the third and fourth years in Arts after a regular course in any University in the British Dominions, will be accepted in lieu of Junior and Senior standing respectively.

44.—(1) At all examinations, a confidential report from the staff, or the teacher, as the case may be, as to the standing of their candidates will be taken into account in setting the results. Only the names of the candidates who, in the opinion of the staff, have completed satisfactorily the courses for the examination shall be included in this confidential report.

(2) The certificate provided for in Reg. 49 (1) and (2) shall not be given by the Principal unless he has complied with all the regulations affecting the course and the time-table [Reg. 40 (1) and (2)] of studies for the examination.

APPROVED HIGH, PUBLIC, AND SEPARATE SCHOOLS.

45.—(1) At his official visits the High, Public or Separate School Inspector shall satisfy himself as to the character and extent of the provision in the schools under his charge for carrying out all the regulations affecting the preparation of candidates for non-professional certificates; and, without his

approval of the School, no candidate therefrom shall be admitted to the examination for such certificates without examination in the subjects of Part I. for a District or a Junior non-professional certificate, as provided for in Regulation 49 (1).

(2) At each inspection, the Principal shall submit for the approval of the Inspector the work of the candidates in Book-keeping and Business Papers and in Art, and their note-books in Science.

I. Junior Non-Professional Examination.

46.—(1) The obligatory subjects for Junior non-professional certificates shall be those of the High School programme of studies as follows, and the examinations shall be taken in the same year:

Part I. Reading, Book-keeping and Business Papers, Art, and Elementary Science of the Lower School.

Part II.—English Composition, English Literature, History, (Ancient, British, and Canadian), Algebra, Geometry, Physics, and Chemistry of the Middle School, with the Geography of the Lower School and the Lower and special Middle School courses in English Grammar and Arithmetic and Mensuration.

(2) For the Junior non-professional teachers' certificate, candidates will not be required to take any foreign language; but candidates at the examination for this grade of certificate who take also the papers in the Lower and Middle school courses in Latin (the pass matriculation course) at the July departmental examinations of the same year, and who make at least 34 per cent. on each of such Latin papers and 50 per cent. of the aggregate of the marks assigned to both papers (the composition, and the authors' and grammar papers) shall have the marks so obtained counted as part of the 60 per cent. required on the aggregate of the obligatory subjects.

II. Senior Non-Professional Examination.

47. The subjects of examination shall be those prescribed for the Upper School of the High Schools, and the examinations may be taken at one time or in two parts at different times, as follows:

Part I.—English Composition and Rhetoric, English Literature, Mediæval History, Algebra, Geometry, Trigonometry, and Physics.

Part II.—History (Modern and British), Biology, Latin, with Chemistry and Mineralogy, or French and German, or Greek and German, or Greek and French.

III. District Non-Professional Examination.

48.—(1) When, in the opinion of the County Board of Examiners, the standard of the Junior non-professional examination for teachers is too high for the condition of the county or district or any part thereof, the Minister of Education may authorize the issue of District certificates; but the examinations therefor shall be held only in such counties or districts and the professional certificates based thereon shall be valid only for such schools as each County Board may designate.

(2) The report of the Board shall set forth in full detail the reasons for the Board's recommendation, and in particular, the assessed value and special circumstances of the school section concerned.

(3) The subjects for District teachers' non-professional certificates shall be those of the Lower School of the High Schools; and for the purposes of this examination, these subjects shall be divided into two parts and the examinations shall be taken in the same year, as follows:

Part I.—Reading, Book-keeping, and Business Papers, Art, and Elementary Science.

Part II.—English Literature, Geography, Spelling, Composition, English Grammar, History, (British and Canadian), Arithmetic and Mensuration, Algebra, and Geometry.

(4) The examination papers will be set and the results settled by the Education Department; but the County Board of Examiners shall settle finally the results of the examinations of teachers in localities where French or German is spoken in addition to English.

(5) The texts for the examination in English Literature in Part II. will be prescribed by the Education Department from year to year. The Geometry for this examination shall consist of the practical course prescribed for the Lower School of the High Schools, and of the propositions in Euclid as detailed in Schedule C.

Special Conditions of Admission.

49.—(1) A candidate from an approved High, Public or Separate School shall be admitted to the examination in Part II. for a District or a Junior non-professional certificate, without examination in Part I., provided the Principal of the school in which he completed the subjects thereof, certifies to the Public School Inspector concerned that the candidate has completed them satisfactorily.

(2) A candidate for a Senior non-professional certificate shall not be admitted to the examination therefor unless he presents to the Public School Inspector (a) the certificate that he already holds Junior standing, or (b) the certificate of competency in the subjects of Part I. required from candidates at the Junior examination, and also a certificate from the Principal in whose school he completed his High School Middle School course, that he has completed satisfactorily the course prescribed for Part II. of the Junior examination.

(3) All other candidates than those whose qualifications have been certified to by the Principal, as provided in subsections (1) and (2) preceding, shall pass both parts of the departmental written examinations for District and Junior non-professional certificates, as the case may be; but candidates who fail at the examination for either part shall be allowed the privilege of subsequently securing the required standing therein.

(4) Before being admitted to any of the examinations, all candidates shall in addition satisfy the Public School Inspector to whom they submit their applications, by certificate from the Principal of the approved School

in which they completed the course for the examination or by other credible testimony, that they have taken up practically the course in Science prescribed for the examinations to which they desire to be admitted, and that they have read the four works in English Literature as provided in Regulation 43 (2) (g) preceding.

INTERIM PROVISIONS FOR 1905 AND 1906.

50. The Public and High School Courses of Study and the scheme of Departmental Examinations as herein prescribed, shall take effect forthwith, except as follows:

(1) Public School Inspectors shall have discretionary powers in dealing with the introduction of the new subjects into the Public Schools.

(2) Until these new subjects are fully introduced, High School Entrance Boards shall also have discretionary powers in dealing with such subjects at the Entrance Examinations.

(3) At the examination for Part II. junior non-professional Public School Teachers' certificates in 1905, the subjects and standards shall be as follows: English Grammar, English Composition, English Literature, Geography, History (Ancient, British and Canadian), Arithmetic and Mensuration, Algebra, Geometry, Physics, and either (a) Chemistry or (b) Latin with one of Greek, French, German, Chemistry; the standard being with option (a) 34 per cent. of each subject and 60 per cent. of the aggregate, and with option (b) 34 per cent. of each subject and 50 per cent. of the aggregate. The Course of Study in each subject shall be that herein prescribed, except in Geometry, in which the course shall be that prescribed for the Junior Leaving Examination of 1904. (For details see appendix E). At this (1905) Examination also a Part II. Junior non-professional Teachers' certificate will give full standing, if endorsed and certified to by any High School Principal or Public School Inspector with a statement that the holder has taken the required course in Drawing, Book-keeping, Reading and Botany or Agriculture previously prescribed for Part I. Junior Leaving standing. In 1905 no examination will be held in the subject of Part I. For the examination of 1906, the teachers' certificate as to the candidate's competency in the subjects of Part I. of the Junior Examination shall require only one year's course in each of Botany and Zoology, and in Art.

(4) At the examination for Senior non-professional Public School Teachers' Certificates in 1905 and in 1906, the subjects and standards shall be those prescribed for the Senior Leaving examination of 1904, viz: Part I., English Composition and Rhetoric, English Literature, Algebra, Geometry, Trigonometry, English and Ancient History; and Part II., Latin, Physics, and one of the following groups, (a) French and Greek, (b) German and Greek, (c) French and German, (d) French and Chemistry, (e) German and Chemistry, (f) Biology and Chemistry; the standard being 34 per cent. of each subject and 50 per cent. of the aggregate of marks. At this examination in 1905 and in 1906 the courses of study in Geometry, History, and Science shall be those prescribed for Senior standing in 1904 (For details see appendix E.); but, in all the other subjects, the courses shall be those herein prescribed.

(5) At the examination for District Certificates in 1905 candidates shall pass an examination in the following subjects as defined in the courses of study for the Lower School of the High Schools and in appendix E: English Grammar, English Literature, English Composition, Arithmetic and Mensuration, Algebra, Geometry, History, Geography, and Spelling; but any certificate obtained on the above examination will give the non-professional standing required for a District certificate only when endorsed by a Public School Inspector or High School Principal with a statement to the effect that the holder thereof has completed satisfactorily the courses of study in Reading, Drawing, Book-keeping, and Botany or Agriculture heretofore prescribed for Form I. of the High Schools. The standard for this (1905) examination shall be 34 per cent. of the marks assigned to each paper and 50 per cent. of the aggregate marks.

SPECIALISTS' STANDING.

51.—(1) Any person who obtains a degree in Arts in the honor department of Mathematics, Science, Classics, English and History, Moderns and History, or French and German, as specified in the calendar of any University in Canada and accepted by the Education Department, who has graduated with at least second class honors (or 66 per cent. in each subject of such honor department) and who has been in actual attendance in such department at a University for not less than two academic years, shall be entitled to the non-professional qualification of a Specialist in such department.

(2) A graduate who has not taken an Honor Degree in one of the above courses shall be entitled to the non-professional standing of a Specialist, on submitting to the Education Department a certificate from the Registrar of the University, that he has passed, subsequently to graduation, the examinations prescribed for each year of the Honor course of the department in which he seeks to be recognized as a Specialist, or any examinations which are recommended by the University as equivalent thereto and accepted as such by the Education Department; and that he has been in actual attendance in such department at a University for not less than two academic years in preparation for the examinations therefor.

52. Any person who passes the examination in the subjects set forth in Circular No. 2.—Courses for Commercial and Art Specialists—(each paper being valued at 100, and the standard being 40 per cent. in each and 60 per cent. of the aggregate, with 75 per cent. in honors), and who is the holder of a High School Assistants' Certificate, shall be entitled to an interim Commercial or Art Specialist's Certificate.

EXAMINATION AND OTHER FEES.

53. The fees authorized by the Education Department shall be as follows: Candidates for the Entrance Examination, if so ordered by the Board of Trustees or the County Council, \$1; District Certificate, \$5; Junior Teachers' Examination, \$5; Part I. Senior Teachers' Examination, \$3; Part II. Senior Teachers' Examination, \$3; Junior Matriculation, \$5; Senior Teachers' Examination, at one examination, \$5; Commercial and Art Specialists' each \$5; Part I. Junior Teachers' Examination when taken alone, \$3; for

Candidates for examination in one or more subjects only (not exceeding four), for the purpose of completing a course for pass Matriculation into any University or Learned Profession, \$2; Tuition, County Model School, when so ordered by the Board of Trustees, \$5; Kindergarten Assistants, \$3; Directors, \$5; Examination Normal School, \$10; Examination Normal College, \$15; Appeals of all kinds, \$2. (Fee to be refunded if the appeal is sustained.)

KINDERGARTENS.

54. No person shall be appointed to take charge of a Kindergarten who has not passed the examination prescribed for Director of Kindergartens. No person shall be admitted to the course in training prescribed for Assistants who is not 18 years of age and who has not Junior Teacher's non-professional or Junior Matriculation standing, or who has not successfully pursued the High School Lower and Middle School courses. Any person who has taken the equivalent of such a course at some other educational institution may, on the recommendation of the Inspector and with the consent of the Minister of Education, be admitted to training. No person shall be admitted to the course prescribed for a Director who has not pursued the course prescribed for an Assistant.

55.—(1) Any person who attends a Kindergarten for one year and satisfactorily completes the course prescribed for Assistants shall, on the recommendation of the Director of such Kindergarten endorsed by the Public School Inspector or by the Principal of the Normal School where the course is pursued at one of the Provincial Kindergartens, be entitled to an Assistant's certificate, valid for two years.

(2) The holder of an Assistant's certificate or the holder of a Second Class Provincial certificate on attending a Provincial Kindergarten for one year and on passing the prescribed examinations shall be entitled to a Director's certificate.

56.—(1) The examination for Directors shall include Psychology and the general principles of Froebel's system, History of Education, Theory and Practice of the Gifts and Occupations, Mutter and Kose-Leider, Botany and Natural History, Miscellaneous Topics, including discipline and methods of morning talks, each, 100; Practical Teaching, 500; Book work, 400. There shall also be sessional examinations in Music, Drawing and Physical Culture, each valued at 50.

(2) The examination for Assistants shall include Theory and Practice of the Gifts, Theory and Practice of the Occupations, Miscellaneous Topics, including the general principles of Froebel's System and their application to songs, games, elementary science, morning talks and discipline, each valued at 100.

(3) There shall be at least two sessional examinations and one final examination conducted by the staff and the Principal of the Normal School, in the case of Directors, and by the Staff and the Public School Inspector in the case of Assistants.

(4) Candidates for the Director's or the Assistant's Certificate must obtain 40 per cent. of the marks assigned to each subject and 60 per cent. of the ag-

gregate marks, the sessional and final examinations being taken together. Seventy-five per cent of the aggregate will be required for honors.

COUNTY AND CITY MODEL SCHOOLS.

57. The Board of Examiners for every County, or the trustees of any city, with the approval of the Minister of Education, may set apart at least one Public School for the professional training of third-class teachers. The Principal of such school shall be the holder of a first-class certificate from the Education Department and shall have at least three years' experience as a Public School Teacher. In every Model School there shall be at least three assistants on the staff who shall be the holders of first or second-class certificates. The County Board of Examiners shall distribute the teachers-in-training among the County Model Schools as may be deemed expedient.

58. The Model School term shall begin on the second day of September and shall close on the 15th day of December. During the term the Principal of the Public School to which the Model School is attached shall be relieved of all Public School duties except the management and supervision of the Public School. The assistants shall give such instruction to the teachers-in-training as may be required by the Principal or by the regulations of the Education Department. There shall be a room for the exclusive use of the teachers-in-training either in the Public School buildings or elsewhere equally convenient.

59. Application for admission to a Model School shall be made to the Inspector not later than the twenty-fifth of August. Any person who has a full Junior Teachers' Non-professional Certificate, or a District Non-professional Certificate, or who is considered eligible by the Board of Examiners for a District certificate and who will be eighteen years of age before the close of the term may be admitted as a teacher-in-training. The teachers in training shall be subject to the discipline of the Principal with an appeal in case of dispute to the Chairman of the County Board of Examiners. Boards of Trustees may impose a tuition fee, not exceeding \$5, on each teacher in training.

60. The course of study in Model Schools shall consist of instruction in School Management, to be valued for examination purposes at 100; instruction in the Science of Education, 100; instructions in the best methods of teaching all the subjects on the Public School Course of Study, four papers, 100 each; instructions in the School Law and Regulations so far as they relate to the duties of the teachers and pupils, instruction in Reading, School Hygiene, Music, Art and Physical Culture, 50 each; and such practice in teaching as will cultivate correct methods of presenting subjects to a class and develop the art of school government. The final examination of the Education Department will be limited to School Management, the Science of Education, School Law and Regulations and Methods in Spelling, Literature, Composition, Grammar, History, Geography, Arithmetic and Mensuration, and Penmanship.

61. The Principal of the School shall submit to the Board of Examiners a report with respect to the standing of every teacher-in-training, having regard to his conduct during the Session, his knowledge of the Public School Course of Study, his aptitude as a teacher, his powers of discipline and government in the school room and such other qualities as in the opinion of the

Principal are necessary to a successful teacher. The Principal shall also report the standing of each teacher-in-training in the subjects of Hygiene, Music, Physical Culture, and Art and Nature Study (both after 1904), as determined by at least one Sessional examination: These reports shall be considered by the Board of Examiners at the final examination in estimating the standing of the candidates for certificate.

62. During the last week of the Session, the County Board of Examiners shall require each teacher-in-training to teach in the presence of such members of the Board as may be appointed for that purpose, two lessons of twenty minutes each, one of which shall be assigned by the presiding examiner one day, and the other forty minutes before it is to be taught. The lessons shall be valued at 100 each, shall be appraised by different examiners, and shall not be taught in the same Form or in the same subject. The Board of Examiners shall also submit the candidates to a practical test of their ability to place upon the blackboard with neatness and despatch any exercise for pupils they may deem expedient. The time allowed for such a test shall not exceed ten minutes and the valuation 50 marks.

63. Any teacher-in-training having the full Junior Teachers' non-professional standing who obtains forty per cent. of the marks assigned to each subject (including practical teaching) and sixty per cent. of the aggregate shall be awarded a Third class certificate valid for three years. At the request of the County Board, when there is a scarcity of teachers, and with the permission of the Minister of Education, a certificate for a shorter period and valid only within the jurisdiction of the County Board, to be known as a District certificate, may be awarded to teachers-in-training who obtain a lower percentage, or to such other persons whose non-professional standing would entitle them only to District certificate. The Board may reject any candidate whose scholarship, on the report of the Principal or of an Examiner, appears to be defective. The decision of the Board with respect to the examination shall be final.

DISTRICT MODEL SCHOOLS.

64. The Minister of Education may set apart two Public Schools in each of the Districts of Thunder Bay, Algoma, Parry Sound, and Nipissing, as Model Schools for candidates for District certificates. No school shall rank as a District Model School unless it has a Continuation Class of the highest grade, and unless the staff consists of at least three teachers, viz: a Principal holding a first-class certificate and at least one of his assistants holding a second-class certificate. Teachers-in-training at District Model Schools shall take the course of study and the final examinations prescribed for District Certificate examinations. Candidates for teachers' certificates at the District Model School Examinations shall be at least eighteen years of age, and shall take such a course of professional training in the subjects prescribed for County Model Schools as the Inspector of the District may direct.

65. In cities and counties where the French or German language prevails, the Board of Examiners, with the approval of the Education Department may establish a Model School for the training of teachers of French or German origin; such schools shall hold one term each year, viz: From the first of September to the first of July. The course of study shall be the non-professional course required for a District certificate and the professional course

required for a County Model School. The examination in English shall be conducted on the papers prescribed for the District certificate. The examination in French or German shall be limited to Reading, Grammar, and Composition and may be both oral and written. The papers in French and German shall be prepared by the Board of Examiners. The Board may submit the teachers in training to such an examination on the professional course as it deems expedient.

PROVINCIAL NORMAL AND MODEL SCHOOLS.

66. The session of the Normal Schools will extend from the second Tuesday in September in each year to the third Friday in June of the year following, and will consist of two terms. The first term will begin on the second Tuesday in September and end on the eighteenth day of December of the same year. The second term of the session will begin on the seventh day of January of the following year and end on the third Friday in June.

67.—(1) Any student with the full Senior Teachers' non-professional standing, or any teacher who has at least full Junior Teachers' non-professional standing and who has taught a public school successfully for one year or who after passing the County Model School examination has taught for six months under the supervision of the Inspector of a city having a Model School may be admitted as a Normal School student. Every applicant for admission shall be required to produce a medical certificate of freedom from serious pulmonary affections and from seriously defective eyesight and hearing, also a certificate of good moral character. The above-specified certificates are to be presented to the Principal on the opening day.

(2) Application for admission is to be made to the Deputy Minister on or before the first day of September preceding the session to which admission is desired. The fee for the session is ten dollars (\$10.00) and is to be paid when application for admission is made.

68.—(1) The Principal of the Normal School shall be responsible for the discipline and management of the teachers-in-training. He shall prescribe the duties of the staff, subject to the approval of the Minister of Education. The staff shall carry out the instruction of the Principal with regard to discipline, management, methods of study and all matters affecting the efficiency of the Normal School and the progress of the teachers-in-training.

(2) Teachers-in-training shall attend regularly and punctually throughout the session and shall submit to such discipline and direction as may be prescribed by the Principal. They shall lodge and board at such houses only as are provided by the Principal. Ladies and gentlemen shall not board at the same house.

69. The course of study shall consist of the following subjects:—

I. The Science of Education:

1. Psychology;
2. Kindergarten Principles;
3. Child Study;

II. History of Education.

III. School Management.

IV. A. English :

1. Language and Composition;
2. Grammar;
3. Literature;
4. Spelling.

B. Mathematics :

1. Arithmetic;
2. Algebra;
3. Geometry.

C. Nature Study and Elementary Science :

1. Elementary study of surroundings;
2. Biology, Physics, Chemistry, etc.;
3. Agriculture.

D. Reading.

E. Geography.

F. History.

G. Physiology and Hygiene.

H. Manual Training :

1. Woodwork;
2. Paper and Cardboard work;
3. Basketry;
4. Weaving;
5. Metal work;
6. Modelling;
7. Glass work.

I. Household Science :

1. Needlework;
2. Household Economics.

J. Form Study, Drawing, and Color Work.

K. Writing.

L. Music.

M. Physical Training.

V. Practice Teaching in the Model School.

VI. Such other subjects as may be prescribed by the Minister of Education.

70. For examination purposes the subjects shall be valued as follows : Practice Teaching in the Model School, 500 marks; by the Departmental Examiners, 300; Psychology, 400; Kindergarten Principles and Child Study, 50; History of Education, 300; School Management, 300; English, group A : Grammar, Literature, Composition and Spelling, 200; group B : Reading, History and Geography, 200; Mathematics : Arithmetic, Algebra, and Geometry, 200; Nature Study and Elementary Science : Biology, Physics, etc., 200; Agriculture, Hygiene, Drawing, Writing, Music, Physical Culture, Manual Training, Household Economics and Needlework, each 50.

71.—(1) Teachers-in-training shall take written examinations, to be conducted by the staff, covering every subject on the course of study.

(2) An examination in practical teaching, to be conducted according to the instructions of the Minister of Education, shall be required of every teacher-in-training.

(3) Any candidate who obtains 40 per cent. of the marks in each subject of the written examinations and 40 per cent. of the marks in teaching (the report of the staff and the report of the special examiners being taken jointly) and 60 per cent. of the aggregate marks shall be entitled to pass standing. Candidates making 75 per cent. of the aggregate marks shall be awarded honors.

(4) Candidates obtaining from 50 to 59 per cent., inclusive, of the aggregate marks shall be awarded interim certificates valid for two years. On presentation of a certificate of successful teaching from an inspector under whose jurisdiction they may have taught after leaving a Normal School, those holding these interim certificates may present themselves for the final written and practical examinations at a Normal School after having taught for at least one year.

(5) Candidates making less than 50 per cent. of the aggregate marks shall be required to attend a Normal School another term.

72. The terms of the Provincial Model Schools shall correspond with those of the Public Schools in cities. The hours of study shall be from 9.30 a.m. to 12 a.m., and from 1.30 p.m. to 3.30 p.m., unless otherwise determined by the Principal. The regulations of the Education Department with regard to pupils and teachers in Public Schools shall apply to the teaching staff and to pupils of the Model Schools, subject to any modifications that may be made from time to time by the Minister of Education.

73. The Head Master of each Model School and the Director of the Provincial Kindergarten shall act under the direction of the Principal of the Normal School to which their respective departments are attached, and shall be responsible to him for the order, discipline and progress of the pupils, and also for the accuracy and usefulness of the lessons conducted by the teachers-in-training.

ONTARIO NORMAL COLLEGE.

74. The Ontario Normal College shall open each year on the 1st of October and close on the 31st of May. Any person who has Senior (Senior Leaving) standing or who is a graduate in Arts of any university in the British Dominions, and who will be eighteen years of age before the close of the College year, may be admitted as a teacher-in-training on application to the Minister of Education on or before the 15th of September. Candidates for Specialists' certificates must submit evidence as to their non-professional Specialist standing.

75.—(1) The Course of Study shall consist of (a) lectures on Psychology, the History of Educational systems, the Science of Education, the best methods of teaching each subject of the High and Public School courses of study, School Management, (b) Practice-teaching, and (c) instruction in Reading, School Hygiene, Stenography, Bookkeeping, Typewriting, Art, Manual Training, Household Science, Physical Culture, and such other subjects as may be prescribed by the Minister of Education.

(2) The marks allowed for examination purposes shall be as follows; Psychology and Science of Education, each 200; History of Education, School Management, Methods in English and History, in Mathematics, in Science, in Classics, and in French and German, each 150.

(3) The examinations shall also call for a review by the teacher-in-training of the High School courses of study and shall be of such a character as will test his knowledge of the subjects which a High School teacher is legally qualified to teach.

76. Teachers-in-training shall lodge in such houses only as are approved by the Principal; ladies and gentlemen shall not board in the same house nor shall they mingle together in the class-rooms or in the halls of the Normal College. They shall attend regularly and punctually upon lectures and shall submit to the rules of the College with regard to discipline, or any other matter required by the Principal, and shall undertake such practice teaching as may be prescribed by the Minister of Education.

77. The Principal shall be responsible for the organization and management of the College and for the discipline of the teachers-in-training. He shall prescribe the duties of his staff, and shall from time to time be present at their instruction and at the practice teaching of the teachers-in-training. He shall keep a record of the sessional examinations on the forms prescribed by the Minister of Education and shall make in addition such observations with respect to the conduct of each teacher-in-training and his aptitude as a teacher as he may deem expedient.

78. Each lecturer shall explain and illustrate the best methods of dealing with each branch of his department as it should be taught in the different Forms of a High or Public School, and shall, as far as possible, explain and justify his methods on scientific principles, giving model lessons for classes in different stages of advancement. He shall keep a record of the practice teaching of every teacher-in-training, and shall report to the Principal from time to time any breach of discipline, any irregularity or any defect of scholarship on the part of the teacher-in-training, or any other matter which may affect the work of the College.

79.—(1) Teachers-in-training shall take two written examinations during the Session, viz., one at the end of the year and the other at the close of the session, and such oral examinations as may be considered necessary for testing their scholarship, their knowledge of methods, and their teaching ability. These examinations shall be conducted by the staff of the College.

(2) No teacher-in-training shall be recommended to pass by the examiners who has made less than 40 per cent. of the marks at the sessional examination (fifty marks being the maximum for each) in Reading, Writing, Manual Training (or Household Science), Art, or Physical Culture. Any candidate who obtains 40 per cent. of the marks in each subject of the examinations (the first and final written examinations being taken jointly), and 60 per cent. of the aggregate marks, shall be entitled to pass standing. A candidate who fails in the total only, but who makes at least 50 per cent., may be awarded an interim Public School teachers' certificate. Candidates for specialist's standing must obtain 66 per cent. of the marks assigned to subjects of their specialist department. Candidates making seventy-five per cent. of the aggregate marks shall be awarded honors.

80.—(1) Any candidate whose scholarship in the subjects he is legally qualified to teach is satisfactory to the staff as tested by written and oral examinations and who obtains the required standing in Psychology, the Science of Education, the History of Education, School Management, Methods in Mathematics, in English and History, in Latin, in Elementary Science, and in one of the following groups, viz: (a) Chemistry, Mineralogy, Physics, and Biology, (b) French and German, (c) French and Greek (d) German and Greek, shall be entitled to a Normal College Interim certificate.

(2) The holder of a Specialist's non-professional certificate in any of the departments recognized by the Education Department, who passes the final examination (including methods in the subjects of his non-professional certificate) shall be entitled to a Normal College Interim Specialist's certificate in the subjects of his non-professional Specialist's course; but such candidate shall be required to show a more extended acquaintance with their special department than is required from ordinary candidates.

(3) All students entering the Normal College, must take the course therein prescribed, irrespectively of the academic course which they may have taken.

(4) Unsuccessful candidates at previous examinations will be allowed to write at the final examination of any year without attendance at the Normal College, and may confine themselves to the same subjects as taken previously.

(5) Teachers of five years' successful experience, who hold Normal School Certificates, and who have the necessary academic standing, may write at the final examination of the Normal College without attendance.

(6) Holders of Normal College Interim Certificates or of High School Assistants' Certificates, provided they have the necessary non-professional standing, may obtain Specialist's standing on passing the final examination of the Normal College in their special department.

(7) The Principal may make such reasonable modifications of the scheme of optional groups (Reg. 80, 1, a, b, c, d), as will meet the condition of candidates who have obtained their non-professional standing on courses other than those now prescribed by the Regulations.

THE EDUCATIONAL COUNCIL.

81. The Educational Council authorized by the Education Department Act, 1901, to conduct Departmental examinations, shall hold its first meeting each year as may be fixed by the Minister of Education and shall organize by electing as chairman one of its members. Subsequent meetings of the Council shall be held from time to time as may be determined by the Council.

82. The Council shall appoint examiners of well known ability as teachers in either a University or a High School, to prepare examination papers for the (a) Junior and Senior Teachers' and Matriculation examinations, and (b) such other examinations as may be transferred to the Council with the approval of the Education Department. The Council shall also appoint examiners of well known experience as Inspectors or Teachers (from lists to be submitted by the Minister of Education), to prepare examination papers at all other departmental examinations.

83. For the purpose of reading the answer papers of candidates at the Examinations of (a) aforesaid, the Council shall appoint, as associate examiners, graduates of any of the Universities in the British Dominions, or specialists according to the regulations of the Education Department, who are actually engaged in teaching, and who have had not less than two years' experience. For the purpose of reading the answer papers of candidates at other examinations, the Council shall appoint as associate examiners persons in actual service holding at least First Class certificates. The lists from which such selection is made shall be furnished by the Minister of Education and shall in each case contain the names of twice the number of associate examiners to be appointed. The number of examiners appointed by the Council for each examination shall be subject to the instructions of the Minister of Education from time to time.

84. All communications or references requiring the attention of the Council shall be addressed to the Education Department. The Registrar of the Council shall submit for consideration all matters referred by the Minister of Education. The Council shall report promptly to the Minister of Education all matters that require any action by the Education Department or any of its officers. The Council shall appoint an executive committee, of not more than three members. The Education Department shall appoint a Chairman of the Board of Examiners who shall exercise such supervision over the examinations as the Council may order. Candidates may have their papers re-examined on placing an appeal to that effect in the hands of the Minister of Education within fifteen days after the issue of the results of the examinations.

TEACHERS' CERTIFICATES.

85. (1) The Minister of Education may issue certificates on the report of the Educational Council or the Education Department, as follows, viz., permanent Third Class or District Certificates to teachers of ten years' successful experience. (2) Any person who attends a Public Kindergarten for one year and passes the prescribed examination shall be entitled to an Assistant's certificate; any person who has obtained an Assistant's certificate and who has attended a Provincial Kindergarten one year and passes the prescribed examinations shall be entitled to a Second Class Public School. Any person who attends a Normal School one session and who passes the prescribed examinations shall be entitled to a Director's certificate. (3) certificate, permanent or interim, according to the percentage of marks obtained and previous experience. An Interim Second Class Certificate may be extended from year to year on the report of a Public School Inspector. (4) Any person who has passed the prescribed examinations of the Normal College shall be entitled to a Normal College Interim Certificate.

86. A Normal College Interim certificate shall entitle the holder, if under 21 years of age, to teach in a Public School only, and, if over 21 years, to teach in a Public or High School. After two years' successful experience as a teacher, the holder of such certificate shall, on the report of the Inspector concerned, be entitled to a permanent certificate as a First Class Public School teacher or as a High School assistant, ordinary or specialist, according to the class of school in which the experience was acquired. Normal College Interim certificates may be extended from year to year on the report of a Public or a High School Inspector. Any graduate in Arts in any University in the British Dominions, who holds a High School Assistant's certificate, and who, as shown by the report of the High

School Inspector, has taught successfully three years (two of which at least were spent in a High School), shall be entitled to a certificate as Principal of a High School or Collegiate Institute.

87. A third class certificate shall be valid for a period of three years from the date thereof ; and may on expiration be renewed by any Board of Examiners for a period not exceeding three years in all on the following conditions, viz. :—(a) where the applicant has re-passed the Part II. Junior Teachers' examination or holds a non-professional certificate of a higher grade, (b) Where the applicant has re-passed the County Model School examinations. The certificate of any teacher who has not taught the full period of three years for which his certificate was granted may be renewed by the County Board for any time lost by sickness or any other cause. In all cases the report of the Inspector with respect to the efficiency of the applicant as a teacher must be satisfactory. All renewals shall be issued with the authority of the Board, and shall be limited to the jurisdiction of the Board of Examiners granting the same.

88. With the consent of the Minister of Education, a temporary certificate may be given by the Inspector to any person of suitable character and attainments where a qualified teacher is not available, such certificate to be valid only under the Board of Trustees applying for the same.

PUBLIC SCHOOL INSPECTORS AND DUTIES OF INSPECTORS.

89. The holder of a degree in Pedagogy who has had four years' experience as a teacher of which two years shall have been in a Public School, and any person with five years' successful experience as a teacher of which at least three years shall have been in a Public School, who holds either Specialist's non-professional standing obtained on the University examination, or a Degree in Arts from any University in Ontario with first-class graduation honors in one or more of the recognized departments in such University, and who has passed the examination of the Ontario Normal College for a Specialist's certificate, shall be entitled to a certificate as an Inspector of Public Schools.

90. Every inspector of any class of schools conducted under the Education Department, while officially visiting a school, shall have supreme authority in the school, and may direct teachers and pupils in regard to any or all of the exercises of the school-room. He shall, by personal examination or otherwise as he may be directed by the Minister of Education, ascertain the character of the teaching in the schools which he is authorized to visit ; and shall make enquiry and examination, in such manner as he may think proper, into the efficiency of the staff, the accommodations and equipment of the school, and all matters affecting the health and comfort of the pupils. He shall report to the Minister of Education any violation of the Schools Act or the Regulations of the Education Department in reference to the class of schools for which he is inspector.

TEACHERS' INSTITUTES.

91. Every Teachers' Institute shall have one meeting each year on a Friday and Saturday to be named by the Management Committee. The County Council may allow Thursday to be taken also if considered expedient. The Institute shall hold two sittings per day, of three hours each, for at least two days, and one evening sitting. All questions and discus-

sions foreign to the teachers' work shall be avoided. The officers of the Institute shall be a President, Vice-President and Secretary-Treasurer. There shall be a Management Committee of five persons, to be appointed by the members of the Institute. The officers and the Management Committee shall be elected annually.

92. The Inspector shall furnish the Secretary of the Institute with a list of the teachers in his County or inspectoral division. Every Public School teacher shall attend continuously all the sessions of the Institute of his County or inspectoral division and shall answer to the calling of the roll at the opening and closing of each session. A report of the sessions attended by each teacher shall be sent by the Secretary to the Board of Trustees employing such teacher.

READING COURSE.

93. The Minister of Education may prescribe a Course of Reading for the teachers of Public Schools. The Course shall extend over three years, and certificates for reading more than three books in one year shall not be granted by the Inspector. For the purposes of the Course, the year shall not be granted by the Inspector. For the purposes of the Course, the year shall correspond with the calendar year. A teacher may enter on the Course by taking any of the books prescribed for the year. The list of books for each year will be announced by the Education Department.

94. Any teacher who desires a certificate of having taken the Public School Teachers' Reading Course shall make a synopsis of not less than ten or more than fifteen pages of each book read, and shall transmit the same to the Inspector of his district on or before the 30th June in each year. Such synopsis shall be accompanied by a fee of twenty-five cents and a declaration that the books prescribed for the year were read and that the synopsis submitted was prepared without assistance by the person signing the same.

95. The Management Committee of each Teachers' Institute shall appoint two persons, who with the Inspector shall form a Committee for determining whether the synopsis made by the teacher desiring a certificate indicates that the books have been read intelligently. The Inspector shall issue a certificate for each book so read, on the form prescribed by the Minister of Education to every teacher whose synopsis has been found satisfactory. If a teacher is unable to read all the books prescribed for the year, or if the synopsis of any book has been rejected, he may substitute the books of the next year for those omitted or rejected.

96. Any teacher who submits to the Education Department certificates showing that he has satisfactorily read nine of the books prescribed, shall be entitled to receive from the Minister of Education a Diploma certifying to the completion of one full reading course covering three years. Additional Diplomas shall be awarded to teachers who complete additional courses of three years.

RELIGIOUS INSTRUCTION.

97. Every Public and High School shall be opened with the Lord's Prayer and closed with the reading of the Scriptures and the Lord's Prayer, or the prayer authorized by the Department of Education. When a teacher claims to have conscientious scruples in regard to opening or closing the school as herein prescribed, he shall notify the Trustees to that

effect in writing ; and it shall be the duty of the Trustees to make such provision in the premises as they may deem expedient.

98. The Scriptures shall be read daily and systematically ; the portions used may be taken from the book of selections adopted by the Department for that purpose, or from the Bible, as the Trustees by resolution may direct. Trustees may also order the reading of the Bible or the authorized Scripture Selections by both pupils and teachers at the opening and closing of the school, and repeating of the Ten Commandments at least once a week.

99. No pupil shall be required to take part in any religious exercises objected to by his parents or guardians, and in order to the observance of this regulation, the teacher, before commencing a religious exercise, is to allow a short interval to lapse, during which the children of Roman Catholics, and of others who have signified their objection, may retire. If in virtue of the right to be absent from the religious exercises, any pupil does not enter the school room till the close of the time allowed for religious instruction, such absence shall not be treated as an offence against the rules of the school.

100. The clergy of any denomination, or their authorized representatives, shall have the right to give religious instruction to the pupils of their own church, in each school house, at least once a week, after the hour of closing the school in the afternoon ; and if the clergy of more than one denomination apply to give religious instruction in the same school house, the Board of Trustees shall decide on what day of the week the school house shall be at the disposal of the clergymen of each denomination, at the time above stated. But it shall be lawful for the Board of Trustees to allow clergymen of any denomination, or his authorized representative, to give religious instruction to the pupils of his own church providing it be not during the regular hours of the school. Emblems of a denominational character shall not be exhibited in a Public School during regular school hours.

GRANTS TO WEAK SCHOOLS.

101. Where on the report of the Inspector or on other satisfactory evidence it appears that any school section is so limited in area, or is so remote from market or railway accommodation, or has suffered from any exceptional cause as to clearly establish the inability of the ratepayers to bear the ordinary burdens of taxation for school purposes, the Minister of Education may appropriate to such section out of the grant to Poor Schools such sum of money from year to year as he may deem expedient, but nothing in the regulations shall be construed as establishing the claim of any school upon the poor school fund, beyond the discretion of the Education Department.

102. The Inspector shall submit to the County Council at the regular meeting thereof in January or June of each year, a list of the schools in his Inspectoral Division where the assessment for school purposes is insufficient for the proper maintenance of the school, and shall indicate in each case any special reason why the statutory grants for school purposes should be supplemented by the County Council.

103. All schools receiving special grants, either from Township or County Council, shall receive from the Poor School Fund voted by the Legislature the equivalent of such special grant, provided the sum voted by the Legislature is sufficient. When the Legislative grant is not sufficient

to admit of paying the equivalent of the County or Township grant, then such grant shall be made, as nearly as possible *pro rata*. Any portion of the Poor School Fund remaining after such payments are made may be distributed among other weak schools on the report of the Inspector. In making application for grants special attention should be paid to the following requirements :—

(1) That a School Section with definite boundaries has been set apart by the Township Council, having jurisdiction, or, where no municipal organization exists, by the Public School Inspector, if any, under the authority of the twenty-fifth section of the Revised Public Schools Act, 1901.

(2) That Trustees have been duly elected for such section.

(3) That a building and other suitable accommodation for the school have been provided by the Trustees.

(4) That a teacher holding a valid certificate has been employed by the Trustees for at least six months of the year.

(5) That the yearly report in the prescribed form has been sent in to the Inspector, at the time specified, and certified by him as satisfactory.

(6) That the assessed value of the section and the financial condition of the ratepayers are such as to render aid absolutely necessary.

SUPERANNUATED TEACHERS.

104. Any subscriber to the fund for superannuated teachers who fails or neglects to pay the annual subscription of \$4 on or before the 31st of December in any year, shall be required to pay for such year the sum of \$5. In the case of persons under sixty years of age who have been placed upon the superannuated list, proof of disability for professional service shall be furnished annually to the Department. Should it appear that any superannuated teacher under sixty years of age is capable of resuming his profession, the allowance shall in the meantime be withdrawn. No allowance shall be paid unless satisfactory evidence of good moral character is furnished the Education Department annually, or when required.

TEXT BOOKS.

105. (1) The copyright of every authorized text book shall, where possible be vested in the Education Department. The publisher of an authorized text book shall submit to the Minister of Education a sample copy of every edition for approval, and no edition of any text book shall be considered as approved unless a certificate to that effect, in writing, has been issued by the Minister of Education.

(2) Before application is made for the authorization of any text book, the book must have been in circulation for at least six months for examination by teachers, inspectors, and other educationists, provided that this Regulation shall not apply to any book the authorization of which is under consideration at the date of these regulations.

(3) Subject to the preceding sub-section, the Minister of Education, when a change in Text Books is deemed desirable, may submit to a Committee of Education Council, as hereinafter provided, for examination and report any and all books for which such authorization is sought. In the case of Text Books to be used in the Public Schools, the hereinbefore mentioned Committee shall consist of not more than five members, one of whom shall be the Inspector of Public Schools and one of them the Public School

representative on the said Educational Council. In the case of Text Books to be used in the High Schools and Collegiate Institutes, the Committees shall consist of not more than five members, of which the High School representatives on the said Educational Council, and the President of the College and High School section of the Ontario Educational Association shall be members.

106. Before any authorized text book is placed on the market, the publisher thereof shall execute such agreements and give such security for the publication of such book as may be required by the Minister of Education. Any authorized text book shall be subject at every stage of its manufacture to the inspection and approval of the Education Department as regards printing, binding and paper, and may be removed from the list of authorized text books in case the publisher fails to comply with the regulations of the Education Department.

107. Every authorized text book shall bear the imprint of the publisher, and shall show upon the cover the authorized retail price. No part of an authorized text book shall be used for advertising purposes, and no change shall be made in the letter press, binding or paper of any authorized text book without the consent of the Minister of Education. Books recommended as reference books shall not be used as text books by the pupils, and any teacher who permits such books, or any other book not authorized as a text book for the Public Schools, to be used as such, and any teacher who permits the use of charts as substitutes for any of the authorized text books, shall be liable to such penalties as are imposed by the Schools Act.

FREE TEXT BOOKS.

108. Any Public or Separate School Board in rural districts may, by a resolution, decide to have certain Text Books purchased for the pupils free of cost to the parents or guardians.

109. The Text Books that may be provided in this way shall include only such Readers as may be authorized for use in the Public or Separate Schools.

110. Any rural School Board which provides such Text Book free for the scholars shall be entitled to a grant, equivalent to one-half the amount expended, from whatever money may be appropriated for the purpose by the Legislature.

111. Trustees shall have the right to purchase from either wholesale or retail dealers, and on such conditions as they may consider most desirable.

112. The Trustees are required to make proper arrangements for the care of the Text Books which become the property of the Board; and the Principal or a Teacher of the school shall be Librarian, and act under such instructions as may be given by the Minister of Education, the Inspector or the Trustees of the school concerned.

113. All applications for Legislative aid must be made, through the Public (or Separate) School Inspector, to the Minister of Education by the Trustees, who shall give all necessary information regarding the books purchased together with such vouchers from the Booksellers as may be required. The Inspector will make application to the Education Department on a form to be provided.

114. All applications by trustees for Legislative aid must be made before the first day of October in each year, and after the books have been received. Any purchases made after that date and before the same date of

the succeeding year may be included in applications made the following year.

PUBLIC SCHOOL LIBRARIES.

115. The Minister of Education may prepare a catalogue of books adapted for school libraries, or approve of a catalogue recommended by the Inspector for his inspectorate, the lists to include mainly works suitable for children, in such departments as biography, history, geography, travel, mythology and fables, elementary science, citizenship, etc.

116. Any rural school board which provides a library for the scholars shall be entitled to a share of whatever money may be appropriated for the purpose by the Legislature, if it purchases such books as are contained in the approved lists.

117. Every rural school board which establishes a library under these conditions shall be entitled to a grant, equivalent to half the amount expended, but not to exceed \$10, in any one year, and provided the appropriation made by the Legislature will warrant such payment.

118. Should the appropriation made by the Legislature not be sufficient in any year to meet the demand arising from the establishment of rural school libraries, or additions thereto, whatever sum is granted for the purpose by the Legislature will be paid pro rata.

119. The powers heretofore held by trustees to establish school libraries are not affected by these provisions; and Boards have full authority under the provisions of the statute to purchase books for the school library, and to make such selections as they may deem expedient. Any aid granted from the Legislative appropriation will, however, be based solely upon the amount expended for books given in the catalogues prepared or approved by the Minister of Education.

120. The trustees are required to make proper arrangements for the care of the library; and the principal of the school shall be librarian and act under such instructions as may be given by the Minister of Education, the Inspector, or the trustees of the school concerned.

121. All applications for legislative aid must be made, through the Public School Inspector to the Minister of Education, by the trustees, who shall give all necessary information regarding the books purchased, together with such vouchers from the booksellers as may be required. The Inspector shall make application to the Education Department on a form to be provided.

122. All applications by trustees for legislative aid must be made before the first day of July in each year and after the books have been received. Any purchases made after that date may be included in applications made the following year.

RURAL SCHOOL GARDENS.

123. For the purpose of encouraging agriculture and horticulture, and also for the purpose of increasing the attractiveness of rural schools, the Minister of Education may issue instructions for the guidance of trustees, teachers, and inspectors.

124. Any rural School Board which provides a school garden with the necessary equipment and accommodation shall be entitled to a share of whatever money may be appropriated for the purpose by the Legislature.

125. Every rural School Board which provides a school garden shall be entitled to an initial grant not exceeding one hundred dollars, and a

subsequent annual grant of ten dollars, provided the appropriation made by the Legislature will warrant such payment.

126. Should the appropriation made by the Legislature not be sufficient in any year to meet the demands arising from the establishment of school gardens, whatever sum is granted for the purpose by the Legislature will be paid pro rata.

127. The area of the school garden must be at least one acre, in addition to that of the regular school ground, to which it must be adjacent or from which it must be removed only a short distance.

128. The trustees must provide necessary tools and implements, such as rakes, hoes, lines, pruning knives, etc.

129. A suitable shed must be erected for use as a working laboratory and for storage of tools, seeds, etc.

130. Such instructions will be given by the Public School Inspector to the trustees and teacher as will meet the special character of the locality and promote, so far as possible, a practical education.

131. The grant will be payable on the report of the Inspector, who will certify that the School Board has complied with the prescribed conditions.

HOUSEHOLD SCIENCE.

132. Subject to the provisions hereinafter mentioned, no certificate to teach Household Science shall be awarded after September 1st, 1904, to anyone who does not hold at least Junior Leaving or Junior Matriculation standing.

133. All institutions whose graduates may be recognized as teachers of Household Science shall provide, to the satisfaction of the Education Department, suitable courses of study as well as adequate accommodation, equipment and instruction, for students preparing to become teachers in this department.

134. Every student who desires to become a teacher of Household Science must take a two years' course of study in the department, but any person holding a certificate from one of the Normal Schools who completes satisfactorily a one year's course shall be awarded a teacher's certificate in Household Science.

135. Any graduate of the Normal College who completes satisfactorily a one year's course at one of the recognized institutions for the training of teachers in Household Science, shall be awarded a teacher's certificate as a Specialist in this department.

136. Any person holding a certificate to teach Household Science granted by the Education Department shall be qualified to have charge of a department of Household Science under any High, Public or Separate School Board.

137. Certificates as teachers of Household Science shall give no legal qualification to teach any of the other subjects of the school curriculum.

138. No grant shall be paid by the Government towards a department of Household Science unless the teacher who has charge of such department is duly qualified as herein provided.

139. These provisions shall not apply in the case of teachers already in charge of the department of Household Science or to students preparing to be teachers of the subject who have been enrolled before the date of these regulations.

MANUAL TRAINING.

140. Subject to the conditions herein mentioned, the Macdonald Institute, Guelph, shall be the only institution recognized by the Education Department for the training of teachers in Manual Training.

141. The Macdonald Institute shall provide, to the satisfaction of the Education Department, suitable courses of study as well as adequate accommodation, equipment and instruction for students desiring to become teachers of Manual Training.

142. Any person holding at least a second class certificate from one of the Normal Schools, who completes satisfactorily a one year's course at the Macdonald Institute, shall be awarded a teacher's certificate in Manual Training.

143. Any graduate of the Normal College, who completes satisfactorily a one year's course at the Macdonald Institute, shall be awarded a teacher's certificate as a Specialist in Manual Training.

144. Any person holding a certificate from the Macdonald Institute as a Teacher of Manual Training, shall be qualified to have charge of a department of Manual Training under any High, Public or Separate School Board.

145. No grant shall be paid by the Government towards a department of Manual Training unless the teacher who has charge of such department is duly qualified as herein provided.

146. A certificate as a Teacher of Manual Training or as a Specialist in the same department shall give no qualification to teach any of the other subjects of the Public or High School curriculum.

147. These provisions shall not affect any person who is now in charge of a department of Manual Training in any High, Public or Separate School, or who may be appointed by the Board concerned before the 1st of September, 1904; it being understood, that such persons shall have qualifications satisfactory to the Minister of Education.

GENERAL DIRECTIONS TO TRUSTEES.

148. The notice calling an annual or special meeting should be signed by the Secretary or by a majority of the trustees. Any ratepayer may call the meeting to order and nominate a chairman as soon as the hour appointed arrives. The business of all school meetings should be conducted according to the following rules of order :—

(1) *Addressing Chairman.*—Every elector shall rise previously to speaking, and address himself to the chairman.

(2) *Order of speaking.*—When two or more electors arise at once, the chairman shall name the elector who shall speak first, when the other elector or electors shall next have the right to address the meeting in the order named by the chairman.

(3) *Motion to be read.*—Any elector may require the question or motion under discussion to be read for his information at any time, but not so as to interrupt an elector who may be speaking.

(4) *Speaking twice.*—No elector shall speak more than twice on the same question or amendment without leave of the meeting, except in explanation of something which may have been misunderstood, or until every one choosing to speak shall have spoken.

(5) *Protest.*—No protest against an election, or other proceedings of the school meeting, shall be received by the chairman. All protests must be sent to the Inspector within twenty days at least after the meeting.

(6) *Adjournment.*—A motion to adjourn a school meeting shall always be in order, provided that no second motion to the same effect shall be made until after some intermediate proceedings shall have been had.

(7) *Motion to be in writing and seconded.*—A motion cannot be put from the chair, or debated, unless the same be seconded. If required by the chairman, all motions must be reduced to writing.

(8) *Withdrawal of a motion.*—After a motion has been announced or read by the chairman, it shall be deemed to be in possession of the meeting; but may be withdrawn at any time before decision, by the consent of the meeting.

(9) *Kind of motions to be received.*—When a motion is under debate no other motion shall be received, unless to amend it, or to postpone it, or for adjournment.

(10) *Order of putting motion.*—All questions shall be put in the reverse order in which they are moved. Amendments shall be put before the main motion; the last amendment first, and so on.

(11) *Reconsidering motion.*—A motion to reconsider a vote may be made by any elector at the same meeting; but no vote of reconsideration shall be taken more than once on the same question at the same meeting.

(12) *Minutes.*—At the close of every annual or special meeting the chairman should sign the minutes, and send forthwith to the Inspector a copy of the same signed by himself and the Secretary.

(13) *Legal Trustee.*—Every Trustee declared elected by the Chairman of the school meeting is a legal Trustee until his election is set aside by proper authority.

(14) *Use of Seal.*—The seal of the school corporation should not be affixed to letters or notices, but only to contracts, agreements, deeds, or other papers, which are designed to bind the Trustees as a corporation for the payment of money, or the performance of any specified act, duty or thing.

*ACCOMMODATIONS OF HIGH SCHOOLS: GRADING AND GRANTS.

149. School accommodation shall be considered as divided into four grades, according to the character and extent of the premises, school buildings and their equipment.* Where, in Schools already erected, any part of the accommodation is used jointly by the High and Public Schools, the grading shall be one degree lower than if the Schools were separate. In determining the grades, the officers of the Education Department shall have regard to the following considerations:—

(1) *School Grounds.*—The school grounds shall be not less than one acre in extent, easily accessible, not exposed to disturbing noises, and exclusively devoted to High School purposes. The grounds shall be properly levelled and drained, and ornamented with trees, shrubs, and flower beds; they shall also have separate entrances, recreation grounds, and walks for the sexes. The recreation grounds for the sexes shall be separated with a close board fence, wall, or hedge. Provision shall be made for keeping the premises and grounds in good order.

(2) *Water Supply.*—Where there is no other source of water supply there shall be a well in the school premises properly protected against pollution. Lavatories, water-taps or tanks, and drinking cups shall be

*For suggestions in regard to accommodations, sanitation and school room decoration, see section XIV of the Catalogue of Books recommended by the Education Department for High School Reference Libraries, (1902).

provided. Grades I and II shall be given only when the water supply is inside the building.

(3) *Closets*.—The closets for the sexes shall be under separate roofs several feet apart, and properly screened from observation. Each closet shall contain a sufficient number of compartments for the attendance, each compartment being provided with a door. The boys' closet shall be built of glazed brick or similar material; or of wood, painted a dark color and sanded. Urinals, of slate or similar material, divided into compartments and properly situated, shall be provided for the boys, and separate and locked closets for the teachers. The closets and urinals shall be cleansed and disinfected at suitable intervals. Covered walks shall be laid from the door of the school building to the closets. A close, high board fence or wall shall be provided between the boys' and girls' side, from the closet to the school building, and the entrance of the closets shall be properly screened. In the case of Union Schools, the closets for High School pupils shall be separate from the closets for Public School pupils. Where the closets are inside the building the above conditions shall apply *mutatis mutandis*.

(4) *School Building*.—The grading of the school building shall depend upon the site and architectural appearance. In every school building there shall be separate entrances for the sexes with vestibules or covered porches, and separate means of egress at the rear to the recreation grounds and closets. The High School building shall be separate from the Public School building, and at least thirty feet distant from the highway. A school-bell and a flag and flag-pole should be provided.

(5) *Class Rooms*.—The class-rooms shall be conveniently arranged, well proportioned and oblong in shape. Suitable color-schemes should be adopted for the halls and class-rooms (see Books of Reference, note, p. 43.) The floors should be kept in good order. A superficial area of 12 square feet and a cubic air space of 250 feet shall be allowed for each pupil. In three-masters' schools or over, at least one separate class-room shall be provided for science teaching; in two-masters' schools one of the ordinary class-rooms may be used for this purpose, and in the larger schools the laboratories for Chemistry, Physics, and Biology shall be separate. There shall be a hall or class-room in which all the pupils can assemble. A movable fanlight shall be placed over each class-room door. The class-rooms should be decorated with good pictures, casts, and vases, and other beautiful ornaments. (See Books of Reference, note p. 43.)

(6) *Teachers' Private Rooms*.—There shall be at least one room for the private use of the teaching staff, of suitable size and comfortably furnished. Where the teaching staff is large, there shall be two or more private rooms, one of which shall be assigned for the accommodation of the female teachers.

(7) *Halls*.—The halls shall be of suitable size, well lighted, and shall be so placed to admit of separate entrances for the sexes to the waiting-rooms, cap rooms, and class-rooms. In buildings of two or more stories there shall be separate stairways for the sexes, easy of access and well guarded. Suitable color schemes and decorations should be provided.

(8) *Waiting-Rooms and Cap Rooms*.—The waiting-rooms and cap rooms for the sexes shall be conveniently situated with respect to the class-rooms. The waiting-rooms shall be furnished with benches and tables, and the cap rooms, with all necessary appliances for storing umbrellas and for hanging caps or cloaks. Provision shall also be made in the building for storing bicycles.

(9) *Desks*.—There shall be a single desk for each pupil in attendance. The desks shall be of suitable size with movable seats and adjustable lids. There shall be a desk and a chair in each class-room for the use of the teacher, and at least one chair for a visitor. The laboratory shall be supplied with suitable tables for experimental work in both Physics and Chemistry. In the larger schools special provision shall be made for teaching Biology and Physics; special desks shall also be provided for Commercial work. Single desks shall be graded I and double desks II, if there is suitable provision in each case for practical work in Science; otherwise the grading shall be one degree lower.

(10) *Blackboards*.—The blackboards shall be of sufficient extent and of good quality (slate preferred), properly placed in regard to light and distance from the floor, and furnished with troughs to hold chalk dust. There shall be a suitable supply of erasers for teachers and pupils, and the troughs and erasers shall be cleaned every day.

(11) *Lighting*.—The class-rooms shall be lighted from the left of the pupils, the lower edges of the windows being on a level with the heads of the pupils. The windows of every school building shall be adjusted by weights and pulleys. The windows shall admit of an adequate diffusion of light throughout the whole class-room. Grade I is given only when the lighting is from the left.

(12) *Heating*.—The temperature of the class-room, halls, waiting-rooms, cap-rooms and teachers' private rooms shall be not less than sixty-eight degrees. Where stoves are used they shall be so placed and protected as to prevent discomfort to any pupil. Grades I and II shall be given only in the case of schools heated with hot air, steam pipes, or hot-water pipes.

(13) *Ventilation*.—Due regard shall be paid to the moisture as well as the temperature of the atmosphere, and provision shall be made for a complete change of air at least three times every hour. A draft-chamber or other suitable special means of ventilation shall be provided for the laboratory.

(14) *Gymnasium*.—The Gymnasium should either be a part of the main school building or be connected therewith by a covered walk. It shall be adequately heated and ventilated. The sizes best adapted, having regard to the number of pupils, are 80x40, or 70x35. The windows in the sides of the building should be at least twelve feet from the ground; each window should be about three feet high by six feet long. They should be sufficiently numerous to furnish adequate light and easily adjustable for the purposes of ventilation. One end of the Gymnasium should be a dead wall without windows; the other end should contain the doors for entrance and either one large window or several small ones. The floor should be planked and a suitable supply of mattresses provided. The trapeze and flying rings should be in the central portion, suspended from points at least sixteen feet from the ground. The side rings should be suspended from points thirteen to sixteen feet from the ground. The stationary gymnastic apparatus, and the stove, where one is used for heating and where one is sufficient, should be placed at the end of the building containing the doors and windows. A locker and racks and stands should be provided for the movable appliances when not used by the class. Private rooms should be provided where the pupils may make any desirable change in their dress; and also an adequate number of baths. A running track should also be provided. Where the organization renders it necessary, separate gymnasias should be provided for the sexes. If suitably planned, the assembly-room may be used in addition for Physical Culture.

15. The Grant on the grading of the school premises shall be distributed according to the following scheme :

	Closets.	Water Supply.	School Premises.	School Building.	Class-rooms.	Halls.	Waiting-rooms.	Cap-rooms.	Teachers' Rooms.	Desks.	Blackboards.	Lighting.	Heating.	Ventilation.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
TWO MASTERS' HIGH SCHOOLS—														
Grade I.....	6 00	3 00	15 00	6 00	24 00	3 00	3 00	3 00	3 00	9 00	3 00	6 00	6 00	10 00
II.....	4 50	2 50	12 50	4 50	20 00	2 50	2 50	2 50	2 50	7 50	3 00	4 50	4 50	7 50
III.....	3 00	2 00	7 50	3 00	16 00	2 00	2 00	2 00	2 00	6 00	2 00	3 00	3 00	5 00
IV.....	1 50	1 00	3 75	1 50	12 00	1 50	1 50	1 50	1 50	4 50	1 50	1 50	1 50	2 50
THREE OR MORE MASTERS' HIGH SCHOOLS—														
Grade I.....	9 00	4 50	22 50	9 00	36 00	4 50	4 50	4 50	4 50	13 50	4 50	9 00	9 00	15 00
II.....	6 75	3 25	18 25	6 75	30 00	3 75	3 75	3 75	3 75	11 25	3 75	6 75	6 75	11 25
III.....	4 50	2 00	11 25	4 50	24 00	3 00	3 00	3 00	3 00	9 00	3 00	4 50	4 50	7 50
IV.....	2 25	1 00	5 65	2 25	18 00	2 25	2 25	2 25	2 25	6 75	2 25	2 16	2 25	3 75
COLLEGIATE INSTITUTES—														
Grade I.....	12 00	6 00	30 00	12 00	48 00	6 00	6 00	6 00	6 00	18 00	6 00	12 00	12 00	20 00
II.....	9 00	4 00	25 00	9 00	40 00	5 00	5 00	5 00	5 00	15 00	5 00	9 00	9 00	15 00
III.....	6 00	2 00	15 00	6 00	32 00	4 00	4 00	4 00	4 00	12 00	4 00	6 00	6 00	10 00
IV.....	3 00	1 00	7 50	3 00	24 00	3 00	3 00	3 00	3 00	9 00	3 00	3 00	3 00	5 00

Gymnasium.—There shall be four grades for High Schools and Collegiate Institutes respectively, according to the suitability of the character and extent of the accommodations :—

For Grade I., ten per cent. of the value of the gymnasium as reported by the High School Inspector, will be allowed up to the maximum; for Grade II., ten per cent. of three-fourths of such value; for Grade III., ten per cent. of half of such value; and for Grade IV. ten per cent. of one-fourth of such value; but, when suitable additional accommodation is in use for Physical Culture, the grading will be one degree higher.

TECHNICAL INSTRUCTION: DISTRIBUTION OF GRANTS.

150.—(1) The plans of every building hereafter erected or of any room adapted for the purpose of Manual Training, Household Science, or Special Technical Instruction shall be submitted to the Minister of Education, and be subject to his approval, and a copy of such plans shall be filed in the Department of Education.

(2) Subject to the provisions of sections (5), (7) and (8) hereof, every school maintaining a Manual Training department shall be entitled to the following annual grants :—

(a) A fixed grant of \$350.00.

(b) 10 per cent. of the expenditure over \$600.00 for teacher's salary or salaries, but so as not in any case to exceed \$100.00.

(c) 20 per cent. of the cost of equipment for each of the first five years, and thereafter of the annual renewals and additions.

(3) Subject to the provisions of sections (5), (7) and (8) hereof, every school maintaining a department for Household Science shall receive annually:—

(a) A fixed grant of \$200.00.

(b) 20 per cent. of the expenditure over \$500.00 for teachers' salaries, but so as not to exceed \$50.00.

(c) 20 per cent. of cost of equipment for each of the first five years, and thereafter of annual additions and renewals.

(4) Any school under the control of a Public, Separate, or High School Board, or Board of Education, or of a recognized Technical School Board, which is specially organized and equipped for giving instruction in the theory and practice of the mechanical and industrial arts and sciences, shall be entitled, to receive out of any Legislative appropriation therefor, in addition to such sums as they may be entitled to receive under sections 2 and 3 hereof, such further sum as the Minister of Education may approve, based upon inspection and report, but so as not in any case to exceed \$750.00. To be eligible for this grant the building in which instruction is given, equipment, courses of study, and qualification of staff shall be approved by the Minister of Education.

(5) In apportioning the Legislative grants on equipments, the maximum value recognized shall be (a) for Manual Training \$500.00, (b) for Household Science \$300.00.

(6) The course of study, and the qualifications of every teacher hereafter employed, shall be subject to the approval and regulations of the Education Department.

(7) The unit of distribution of the Legislative grant for Manual Training and Household Science shall be the time of one teacher for five hours on each of five days per week.

(8) The grants mentioned in the foregoing sections shall be subject to such pro-rata increase or reduction as the Legislative appropriation therefor will permit.

(9) No Manual Training or Household Science school or department will be recognized as efficiently equipped that is provided with accommodation for less than 12 or more than 25 students, at any one time, for practical work.

INSTRUCTIONS AND REGULATIONS.

151. Instructions may be issued by the Minister of Education from time to time to Inspectors or other officers in carrying out the provisions of these Regulations.

152. All former Regulations of the Education Department are hereby repealed.

SCHEDULE I.

PUBLIC SCHOOL PROGRAMME OF STUDIES.

General.

MANNERS AND MORALS.—Throughout the whole Public School course the teacher should incidentally, from current incidents, from lessons in literature, history, etc., occasionally by anecdotes and didactic talks, and by his own example as well as by precept, seek to give instruction in moral principles and practices and in good manners.

The following outline is suggested:—

Duties to oneself: purity, health, nobility, self-control, self-reliance, generosity, truthfulness, good taste in dress, cultivation of will power, economy, moral value of work, etc.

Duties in school to teachers and fellow pupils: Obedience, punctuality, neatness, order, etc.

Duties in the home: Respect for parents, consideration for brothers and sisters, the weak, the aged, etc.

Duties to the lower animals: Kindness, etc.

Duties to the people generally: Honesty, courtesy, charity, toleration, justice, etc.

Duties to our country: Patriotism, courage, honor, obedience to law, etc.

Manners: Proper conduct at home, at school, on the street, and in public places, at social gatherings, etc.

READING AND LITERATURE.—In both Reading and Literature throughout the course, the objects are intelligent and intelligible natural reading and the creation of a taste for the best kinds of books. But, in the Reading class the main object is the former; and, in the Literature class, the latter. Silent reading should receive attention as well as oral reading, the results of both being tested by questions or by oral or written reproduction. In Literature, the books should be chiefly narrative and descriptive, being obtained from the School or Public Library or provided by the Board or the pupils themselves, as may be determined by the Board. Even when a supply of suitable books is obtainable, the teacher, in the lower classes in particular should read to the pupils or give them in his own words much of the best literature. From the first also the pupils should be required to memorize and recite choice selections, not merely to cultivate the verbal memory but to learn to appreciate beauty of thought and expression and to store the mind with literature that will enrich their lives.

COMPOSITION.—Throughout the courses, oral and written composition should be correlated with all the other subjects. In the lower forms, the material of the Nature-study, in particular, should afford a basis for oral language lessons. The stories or myths told or read to the pupils should be reproduced by them orally. Pictures may also be used to stimulate their imagination and to train them, by conversation, in easy and correct oral expression of thought and feeling. The written language lessons involve all implied in the oral work, with the addition of training in the mechanism of written expression.

WRITING.—Until the proper formation of letters and figures is thoroughly learned, instruction in writing should be correlated with that in Reading and Arithmetic, and thereafter the character of all the written exercises should receive close attention, with due emphasis upon the attitude of the body and the position of the pen and paper.

ART.—As means of expression, the Art subjects should be connected closely with nature work, constructive work, history, and literature. Many pictures should be used in the lower classes, and each subject should be illustrated with the child's free expression. As in writing, special attention should be given to the attitude of the body and the position of the paper and the pencil, etc.

CONSTRUCTIVE WORK.—The object of constructive work is mental development and physical control. The making of things should be subsidiary to the thought processes involved, and the exercises should sustain the child's interest, and take advantage of his natural desire to construct. Constructive work should make the ability to do a part of the knowing, and

should incorporate knowledge into habit and theory with practice. The amount of work accomplished is unimportant in comparison with the mastery of correct methods and the formation of good habits. Every opportunity should be given the pupils to modify given type models or to design new ones, and in the lower grades to rearrange given units or create new combinations. All of the work should have in it the elements of beauty in construction, in proportion, and in decoration. Though we may not be able to add to the quantity or the variety of the material, we can modify its form and we can arrange it in new combinations. The making of new forms and combinations, the giving of definite expression to ideas and mental images, the rendering of the inner outer, is the great Froebelian doctrine of creativeness.

NATURE STUDY.—From the character of the subject the course must be more or less elastic, and the topics detailed in the programme are intended to be suggestive rather than prescriptive. It may be that, owing to local conditions, topics not named are amongst the best that can be used, but all substitutions and changes shall be made a subject of consultation with the Inspector. The treatment of the subject must always be suited to the age and experience of the pupils, and to the seasons of the year, accessibility of materials, etc. Notes shall not be dictated by the teacher. Mere information, whether from book, written note or even the teacher, is not Nature-study. The acquisition of knowledge must be made secondary to awakening and maintaining the pupil's interest in nature and to training him to habits of observation and investigation. Books for reference and supplementary reading should, however, be provided in the school library. Some valuable publications on the subject of Nature-Study, for the teacher's use, may be obtained free on application to the Department of Agriculture, Toronto.

PHYSICAL CULTURE.—A systematic and well-developed course of physical exercises, both free and with apparatus, should be taken up in each of the subdivisions. While dependent to some extent upon the accommodations and the equipment, the exercises should always be suitable in character and frequency to the age and physical condition of individual pupils. The main object of the course is the symmetrical development of the body, securing at the same time strength and grace, with correct and prompt obedience to the will. The unconstrained but suitable position of the pupils in walking and in their seats and on the floor should also receive due attention. Prevailing defects should be studied and exercises given to correct them. School games and sports should be systematically encouraged. Free play under the direction of the teacher is indispensable, especially in the lower forms.

MUSIC.—Singing should be taken up in all the forms. The fact that it is one means of self-expression should be kept in view, and the songs first learned should be those that the pupil can readily appropriate to himself. In the first form, accordingly, the methods and material of the Kindergarten should be continued. The course should begin with rote-songs, easy notation being introduced towards the close of Form II. and continued throughout according to the age of the pupil and the competency of the teacher. Form III., however, represents the transitional period from the emotional and natural uses of music to its more formal presentation. This stage brings a definite change from ear to eye, from rote to sight-singing, to the recognition in their printed forms of impressions of pitch and rhythm acquired in the earlier stages.

NOTE.—After consultation with the Inspector, suitable books in the different departments of school work should be selected for the library from the *Catalogue of Books Recommended for Public School Libraries*.

Form 1.

READING.—Intelligent and intelligible natural reading. First Readers, Parts I. and II. Phonic Readers. Supplementary reading books and selections of corresponding grade. Analysis and synthesis of words by sound and by letter. Exercises in breathing, articulation, and vocalization.

SPELLING.—Transcription; dictation and oral spelling of phonic words; dictation of selected sentences. Careful attention to spelling in all written work.

LITERATURE.—Myths, fairy stories, and fables; stories and poems illustrating nature study lessons, and appropriate to the time of the year and to the various school holidays; learning and reciting of literary gems.

COMPOSITION.—Oral and written statements in connection with form and color study, nature study, etc.; oral and written reproduction of stories told or read; description of actions, events, etc., within the pupil's experience or knowledge; transcription from readers with attention to capitals, spelling, and punctuation; correction of common errors in conversation.

HISTORY.—Stories of primitive people: Abraham and Isaac, Jacob and his sons, the bondage in Egypt; the Ancient Britons; the North American Indians and Eskimos, their mode of life, their occupations and customs; special reference to the Indian tribes inhabiting the school localities. Stories relating to our public school-holidays.

GEOGRAPHY.—Observation of particular forms of land and water, as hills, valleys, ravines, streams, ponds, etc., in the neighborhood of the school; location of objects observed; general notion of position and direction; activities of home and vicinity, the farm, the shops, the factories, things brought to market, food, milk, water supply, shelter and clothing, rail and other roads, water-ways; systematic trips to places of geographical interest near the school; observation of the progress of the sun from sunrise to sunset; observation of position and appearance of the moon, the "Great Bear"; clouds, appearance, motions; rain, snow, hail, etc.; stories of child-life in other lands with illustrations.

NOTE.—In its early stages geography should be but a phase of the observational work in nature study.

ARITHMETIC.—Numerical relations based upon grouping and separating objects and quantities; measuring in connection with objective work; common units of measurement within the child's experience, as inch, foot, yard, square inch, pint, quart, gallon, peck, cent, dollar, ounce, pound, day, week, month, year, to be learned in practice; addition and subtraction of small numbers; systematic numbering to 1,000's. Accuracy, rapidity and neatness of work should be kept in view.

NOTE.—The need to use numbers will frequently arise in the nature work and other exercises of the class room. The required numerical relations should then be made definite. In this way, with or without figures, many of the analyses and syntheses of the numbers as far as ten will be learned practically. At each stage arithmetical problems should be made to grow out of and be connected with the child's experience.

WRITING.—Special attention to the proper position at the desk, of body and of pen and paper; words and letters as taught in the reading lessons, and figures and numbers as taught in the arithmetic lessons, on paper at the desk under the direct supervision of the teacher; lightness of stroke and freedom of movement, with easy movement exercises from the first, similar to the letter and figure forms, at the desk and at the blackboard.

ART.—Freehand expression with pencil, pen, crayon, and water-color. Six standard colors.

Blackboard and pencil drawing (free movement).—Simple natural objects and other objects in which children are interested, as toys, dolls, etc.

Water colors or colored crayons.—Simple grasses, leaves, sprays, flowers, fruits, birds, pet animals, etc., studied in nature work.

Color, pencil, or ink illustrations of stories; study of pictures.

CONSTRUCTIVE WORK.—Paper cutting and folding in elementary geometric patterns, coloring and grouping of these as bases of design; this work to be connected with drawing and modelling in clay.

Making of objects, as picture frame, window, envelope, etc.

Basket and raffia work.

CLAY MODELLING.—Natural objects, as orange, apple, onion, tomato, potato, egg, simple leaf.

Common objects, as box, bird's house, small loaf of bread, cup (without handle) and saucer, flower pot and saucer, basket, tea set and tray.

NOTE.—In the above, all modelling should be done from the actual object, as many being provided as will enable each child to make a thorough examination.

Free modelling.

NOTE 1.—Under this head the children should make what they wish, and should be encouraged to invent forms and patterns for themselves.

NOTE 2.—Clay modelling should be so treated as to become an aid to conception of form. It should also be correlated with nature study.

PHYSIOLOGY AND HYGIENE.—General observations of the body. Simple lessons on the hair, teeth, skin and nails, and on the care of the organs of the senses. Very simple lessons on eating, drinking, breathing, sleeping, and cleanliness for the purpose of forming good habits.

NOTE.—Physiology and Hygiene should, as far as possible, be made a phase of the observational work in Nature Study.

NATURE STUDY.—Animal life: General appearance and habits of pet animals, their care and food; domestic animals on the farm, their care, habits and uses; birds, their nesting, song, food, migrations in the autumn; metamorphosis of a few conspicuous butterflies or moths.

Plant Life: Work in school garden or in window-boxes; study of a plant, as a geranium or pansy, from slip or seed to flower; caring for plants in pots; buds, their preparation for winter, their development; autumn leaves, collections, forms, tints; economic fruits, collection, forms how stored for winter, fruit as seed holders, dissemination of seeds; roots and stems, uses, comparison of fleshy forms, how stored for winter.

Life on the Farm: Harvesting, primitive and modern methods compared; preparation for winter; the barn and its uses; activities of the farm during winter; winter sports and social life on the farm; the varied operations of spring time; spring time as awakening to new life; effects of sun and moisture on the soil.

Form II.

READING.—Intelligent and intelligible natural reading. Second Reader. Supplementary reading. Phonic Drill. Use of the dictionary begun. Exercises in breathing, articulation, and vocalization.

SPELLING.—Oral spelling, easy words in common use, careful attention to spelling in all written exercises; dictation of assigned passages in readers; difficult words and phrases taught from the blackboard.

LITERATURE.—Literature suited to the interest and capacity of pupils; learning and reciting of literary gems.

COMPOSITION.—Application of the terms, sentence and paragraph, in connection with reading lessons and written exercises. Oral and written compositions on topics connected with nature work, geography, history, etc.; reproduction of stories told or read; narration of personal experiences; description of familiar places, objects, or pictures; simple letter writing; attention to the correctness of English in conversation and in all oral and written exercises; proper use of common punctuation marks, capitals, abbreviations, simple uses of the apostrophe.

HISTORY.—Classical myths and stories: Bible stories; stories connected with pioneer life, especially in the district in which the school is located; biographical sketches of early discoverers and early explorers.

NOTE.—For Bible stories, the following are suggested: Moses, Joshua, Samuel, Saul, David, Solomon; and for the other biographies: the Cabots, Cartier, Champlain, Brebeuf, Lalemant, La Salle, Frontenac, Fraser, Thompson, Henry, Iberville, Cook, Vancouver, Mackenzie, Selkirk, the Norsemen, Columbus, Magellan, Cortes, De Soto, Gilbert, Raleigh.

GEOGRAPHY.—Continued observation of local land and water forms. Observation of highest points in the neighborhood, the chief slopes, hills, valleys, divides, etc. Special study of a brook, creek, or river, to see origin, direction, size, work of draining, eroding, carrying, plant and animal life along banks, etc. Representation by drawing and modelling of typical surface features actually observed by pupil. The earth as a whole: Form, size, rotation, cause of day and night; sources of heat and light. Introduction to globe and map of the world. Surface: Continents, islands, oceans. Local commerce: Articles of exchange, collecting and distributing centres, water supply and sources of food in urban centres, means of transportation, routes. Observation of weather: Winds, direction, force; clouds; rainfall; frost; changes of season; characteristic features of each season; systematic weather records; general notions of climate; record of moon's phases, with drawings of their appearance. People of the locality, nationalities, appearance, original homes, etc.; child life in other lands. Location of any places of historical interest in the neighborhood.

ARITHMETIC.—The grouping and separating of numbers continued; mental arithmetic; addition, subtraction, multiplication, division. Relation of wholes to parts and parts to wholes; measurements continued; use of arithmetical signs and fractional forms in expressing simple relations; notation and numeration to 1,000,000's; Roman notation to one hundred. Accuracy, rapidity and neatness of work should be kept in view.

WRITING.—Correct position and penholding. Movement exercises. Small letters and capitals. Spacing and joining. Copybooks, or graded exercises prepared by the teacher.

ART.—Study of color continued. Color and freehand expression.

Free drawing of plants and other common objects; pencil sketches of common objects.

Water colors: Fall flowers and leaves with brilliant autumn tints; butterflies and other insects; live or mounted birds; fish, etc.

Memory, imaginative, and illustrative drawing.

Study of pictures.

CONSTRUCTIVE WORK.—Work of Form I. continued. Paper cutting for simple patterns and designs. Ruling in geometric forms and coloring these. Simple cardboard and paper construction, as wall-box, chair, trav. etc. Ornamentation of constructed objects by coloring and drawing. Modification of models; original work. Basket and raffia work.

CLAY MODELLING.—Natural forms: Apple, beet, banana, leaf, apple and twig, etc.

Common objects: Cup with handle and saucer; flower pot, bat, piece of coal, etc.

Free modelling.

NEEDLEWORK.—Simple stitches; sewing on buttons and hooks; simple mending.

PHYSIOLOGY AND HYGIENE.—Course in Form I. continued. Simple lessons on digestion, exercise, cleanliness, and ventilation. Lessons on the organs of the body, that can be taught by the Nature Study Method. General effects of tea, coffee, alcohol, and tobacco.

NATURE STUDY.—Course of Form I. continued. Animal life: Life history and habits of domestic animals and of familiar wild animals, as the squirrel, chipmunk, robin, crow; earth-worm, habits, structure, uses; toad, habits, structure, uses; observation of live insects and their activities, comparison of young and adult stages.

Plant Life: Co-operative and individual work in school garden; cultivation of plants in pots with observation of the development of leaves and flowers; parts of leaves and flowers; change of flower to fruit and of fruit to seed; functions of the parts of flowers; the forms and uses of trees; activities connected with forestry and lumbering, with study of pioneer life and present conditions on the prairie.

Observation of farm, garden, and household operations.

Form III.

READING.—Intelligent and intelligible natural reading; Third Reader. Supplementary reading. Use of the dictionary taught and practised. Exercises in breathing, articulation, and vocalization.

SPELLING.—Careful attention to spelling in all written exercises, particularly in composition. Words in common use. Dictation of passages selected from readers, the spelling book, and other books.

LITERATURE.—Books suited to the capacity of the pupils; learning and reciting of suitable selections in both prose and poetry.

COMPOSITION.—Course for Form II. continued. Narrative, descriptive, and epistolary composition of several paragraphs. Punctuation. Business forms, such as bills, receipts, orders, due bills. Attention to correctness of English in conversation and in all the school exercises. Language lessons on the following topics: The simple sentence; subject and predicate; the assertive, interrogative, imperative, and exclamatory forms of sentences; gender, case, and number forms; direct and indirect narration.

HISTORY.—The course of Form II. continued. Biographical sketches of persons famous in history. Short connected stories of the early history of Canada till the capture of Quebec (1759). Short stories of the early history of Britain till the Norman conquest. Biblical stories; the rise and fall of the Kingdom of Israel. A simple account of the municipal form of government in the locality.

NOTE.—In Biography the following are suggested: Cyrus, Constantine, Mohammed, Galileo; King Alfred, William the Conqueror, Thomas à Becket, Stephen Langton, Simon de Montford, Chaucer, the Black Prince, Wycliffe, Joan of Arc, the Kingmaker, Caxton, Mary Queen of Scots; Brant, Brock, Tecumseh, Laura Secord.

GEOGRAPHY.—The Course of Form II. continued. An elementary course defined as follows:

The earth as a whole.—The earth in space: Observation of phases of the moon; relation of the earth and moon to each other; rotation of the earth, direction, time and rate, effects; revolution of the earth, path, direction, time and effects; general observation of stars; difference between fixed

stars and planets; observation of position of north star. Necessity and use of imaginary lines; great and small circles, latitude and longitude, elementary notions only. Relief: world slopes. Drainage: world water partings, world basins, world river system, heat belts, light belts. Continents: locations, relief, drainage, and coast line of each continent. Local, physical, and political geography: relation of township, town or city to county, of county to province, of province to country, position of country in continent. Observation and description of the occupations of men and of local industries, emphasizing those that are typical. Collection of pictures, sketches, materials, and products. Dependence of local industries and commerce on soil, climate and other local physical conditions; and consequent localization of settlement, routes of travel, mills, villages, towns, and cities.

North America.—Location and surroundings, form, coast line, relief, drainage, climate, political divisions; special conditions which determine and affect various industries, as agriculture, grazing, lumbering, mining, hunting, manufacturing; comparison of representative sections with reference to vegetable and animal life, and social conditions and progress of peoples; comparison of typical commercial centres, noting the sources of their wealth and power; the relation of climate to labor and production; water power; methods and routes of distribution and transportation.

Canada.—Study of the Dominion as a whole and in sections, with more particular study of Ontario.

ARITHMETIC.—Notation and numeration reviewed and continued. Practice to secure accuracy and a reasonable degree of rapidity in fundamental operations. Cancellation. Application of fundamental processes to problems of daily life. Standard units and tables, including metric system. Easy problems in measurements. Reduction processes and compound rules. Relation of parts to wholes and wholes to parts continued; simple fractions; decimals in connection with money and units of metric system. Mental arithmetic. Accuracy, rapidity, and neatness of work should be kept in view.

WRITING.—Course of Form II. continued. Copy-books, or graded exercises prepared by the teacher. Business papers.

ART.—Drawing of plants, insects, etc., in any appropriate medium.

Arrangement in spaces, applications in borders, surface patterns and rosettes in color, applied as far as possible in connection with constructive work.

Relative positions of views of geometrical figures in thin cardboard; simple geometrical problems. Study and drawing of details of Greek ornament and vase.

Water color: Course of Form II. continued.

Simple landscapes from window or out-of-doors.

Study of pictures.

CONSTRUCTIVE WORK.—Cardboard construction and ornamentation continued. Whittling in wood with a knife.

Basket and raffia work.

NEEDLEWORK.—Plain hemming and back-stitching; making buttonholes; fine mending.

PHYSIOLOGY AND HYGIENE.—The Course of Form II. continued, with more special study of the growth, waste, and renewal of the body, and the effects of narcotics and stimulants on the various processes.

NATURE STUDY.—Course of Form II. continued.

Animal Life: Adaptation of different kinds of animals to their respective habits and surroundings; birds, life history of types, habits of wild fowl in different seasons; fish, forms and uses of different parts of the body, food and how obtained; life histories of moths, butterflies, beetles and grass-

hoppers; useful insects, as ladybird and dragon fly; harmful insects; Nature's insecticides.

Plant Life: Germination of seeds under controllable conditions and in the school garden and window boxes; opening of buds; study of the forms and functions of the parts of plants, and comparison of these forms and functions in different plants; observation of the culture of farm and garden crops and of orchard and shade trees; the observing and the distinguishing of the common forest trees.

Different kinds of soil, as sand, gravel, loam, leaf-mould and clay; experiments to ascertain how soils are composed, whether of mineral or of decayed organic material, and which best retains water. Additional phenomena of spring in the vicinity of the school, cause of snow melting, ice floating, etc.; how nature prepares the soil for growth of plants. Distinction, between hard and soft, pure and impure water; tests and methods of purification of water.

Sources of Heat: Experiments to show the effects of heat in the expansion of solids, liquids and gases; practical applications. Temperature; thermometer, construction and graduation. Methods of transmission of heat, conduction, convection, and radiation; causes of winds and ocean currents; ventilation.

Form IV.

READING.—Intelligent and intelligible natural reading. Fourth Reader. Supplementary reading. Exercises in breathing, articulation, and vocalization.

SPELLING.—Careful attention to spelling in all school exercises. Simple rules for spelling. Words in common use. Dictation of passages selected from readers, spelling book, and other books.

LITERATURE.—Books suited to the interest and capacity of the pupils. Learning and reciting of suitable selections in both poetry and prose.

COMPOSITION.—Varied oral and written composition exercises in connection with all school subjects. Special attention to correctness of spelling, punctuation, use of capitals, choice and correct form of words; and to clearness, conciseness, freedom, and comprehensiveness of expression. Business papers, business and social correspondence. Topical outlines. Critical attention to correctness of English in conversation and in all school exercises.

HISTORY.—The most important events in Canadian and British history, especially during the nineteenth century. Supplementary reading containing especially interesting biographical accounts of persons famous in Canadian and British history. A brief outline of the duties of citizenship and of the provisions for civil government in Canada. The history of the locality in which the school is situated.

NOTE 1.—The chief object of the course is to arouse an interest in historical reading and to give an acquaintance with those leading points in our history which every citizen should know. The pupil now takes up the subject according to the chronological and logical sequence of events. Besides the class text book, which presents the subject in this order, supplementary reading in biography should be provided in the school library, and the public library should also be utilized. Where a suitable supply of books cannot be obtained, the teacher should read to the pupils.

NOTE 2.—In biography, the following names are suggested: Wolsey, Elizabeth, Shakespeare, Cromwell, Milton, Robert Walpole, the Pitts, Montcalm, Frederick the Great, Nelson, Wellington, Washington, Lincoln, Peel, Stephenson, Howard, Rowland Hill, Tennyson; also the following: Clive, Hastings, Lawrence, Havelock; Wolfe, Carleton, Brock, Elgin, Macdonald; Cook, Phillips; Bartle Frere. Cecil Rhodes. These names, taken in connection with those in Form III, furnish points of interest in every epoch of the history of Canada and the mother land.

ENGLISH GRAMMAR.—The sentence. Subject and predicate. The functional value of words, phrases, and clauses. Kinds of sentences. The main classes of words and the inflections and conjugations. The elementary principles of syntax. Analysis of easy sentences. Parsing.

NOTE.—Formal grammar is now introduced. This introduction should be of a simple character, suited to the as yet undeveloped logical capacity of the pupils. The subject should be taken up inductively and the results secured by examination and comparison of easy examples. The analysis and parsing should be simple and free from mechanical routine, as little technical language being used as possible, and the greatest care being taken to acquire a competent knowledge of the terms used. The inflections and conjugations should be thoroughly memorized. The principles of good English should be applied in the correction of bad English, and the subject should be correlated with both oral and written composition. At this stage, however, the application of these principles will be found to be a very limited one. It is constant use and practice under neverfailing watch and correction that makes good writers and speakers. In the earlier years of the pupils' course the application of direct authority is the most efficient corrective.

GEOGRAPHY.—Course of Form III. continued, with special attention to the commercial geography of Canada, Great Britain, and the United States. Observation of some of the more prominent constellations as the Dippers, Orion, Cassiopeia, and of planets visible in the early evening.

Climate: Distribution of light and heat; observation of sun's apparent movements through the year; light zones, how determined, names, boundaries, variations in length of day and night; isothermal lines, heat belts, general location, cause of variation from light zones, boundaries, movements; winds, cause, winds of torrid and temperate belts, land and sea breezes, peculiar winds, uses of winds; observation of the progress of storms by means of daily weather records and government weather maps; ocean currents, general character, names and location of those of chief importance; rainfall, amount, how measured, regions of great rainfall; deserts.

Eurasia: Topics similar to those relating to North America outlined in Form III.; comparison with North America.

South America, Africa, Australia, and the Continental Islands: A brief study with reference to the principal physical and political divisions, more particular attention being given to the component parts of the British Empire; resources, industries, productions; routes of travel and commerce; centres of population, conditions of the peoples.

ARITHMETIC.—Cancellation continued; measures, multiples. Fractional notation continued; vulgar and decimal fractions. Application of arithmetical processes to simple business transactions in percentage, as simple interest, commission, and insurance. Mental arithmetic. Accuracy, rapidity, and neatness of work should be kept in view.

NOTE.—The processes and problems should be such as find direct application in ordinary business life. Easy mensuration and the metric system (continued) may be added to this course for pupils who do not go beyond the Fourth Form. These subjects, however, will not be required at the High School Entrance Examination.

WRITING.—Course of Form III. continued. Copy-books, or graded exercises prepared by the teacher. Pupils should be taught to be self-critical in respect to legibility, beauty, and rapidity.

BOOK-KEEPING (Optional).—Single entry; day book and ledger, including personal and cash accounts. Business papers, with special attention to the mechanical details of business practice.

NOTE.—This course is intended for pupils who do not go beyond the Fourth Form.

ART.—The Course of Form III. continued.

Adaptation of natural forms to purposes of decorative design.

Freehand perspective.

Simple geometrical drawing, combination of units of design in geometric patterns, combination of scrolls and geometric units for industrial and ornamental work.

Working drawings of type forms.

Simple geometrical problems.

MANUAL TRAINING (Optional).—Use of simpler wood-working tools, as saw, chisel, plane, rule, gauge. Exercises embodied in a complete useful model, and intended to give facility in the use of these tools, as laying out and truing up pieces to dimensions; cutting grooves; making of objects easily constructed and either useful or ornamental, as rulers, keyracks, boxes, brackets, brushholders, penracks, inkstands, school apparatus, etc. Short talks on the construction of tools and on the material used.

HOUSEHOLD SCIENCE (Optional).—The home, its function, care of the house; various rooms and their uses; division of work in the care of house, preparation of food, cleaning methods, etc. Examination and study of equipment in classroom. Detailed study of methods of cooking with the object of acquiring facility of manipulation and measurement as well as a knowledge of the processes of cookery; boiling, simmering, steeping, steaming, broiling, pan-broiling, sauteing, frying, baking; each method to be illustrated by the cooking of one or more articles of food after the principles have been carefully studied. Fuels: coal, wood, gas, electricity, kerosene, alcohol, gasoline, coke; building and care of fires. Effects of heat upon common food materials, water, fresh and dried fruit, non-starchy vegetables, potatoes, legumes, breakfast cereals, flour (a study for thickening purposes only), milk, eggs, meat, fish. The composition and nutritive value of each food—a simple study only. Classification of foods.

Fruit preserving, canning, etc. Yeasts, combination and cooking of various food materials.

Planning, cooking, and serving a meal; marketing, cost; routine of work, table setting, serving; table manners.

Care of kitchen, utensils, etc.; dish washing; towels; special methods of cleaning, tin, granite, iron, brass, wood.

Laundry studies, with simple equipment. Soft and hard water, hot and cold water; soap, soda, etc., their effect upon various fabrics; preparation of clothes for laundry; removal of stains; starching and ironing.

Course of Form III. in needlework continued; cutting and making simple garments.

PHYSIOLOGY AND HYGIENE.—General observations of bones and muscles. Elementary study of the organs of circulation and respiration and their functions. Ventilation; the relation of respiration to health with special reference to disinfectants, exercise, and clothing. Vocal organs and their functions; cultivation and care of the voice. Relation of the nervous system to health and exercise. Continued study of the effects of stimulants and narcotics.

NATURE STUDY.—Course of Form III. continued. Animal life; relation of fish, birds, and wild animals to man; life histories of conspicuous and economic insects; organs and functions.

Plant life; study of organs of plants and their functions; study of economic and wild plants from seed to fruit in the school garden, home garden, farm, and forest; weeds injurious to crops and methods of destroying them; buds and twigs; wood, rings, grain, and bark, uses, etc.

Observing local minerals and rocks, their properties and uses; experiments to show composition of soils and their relation to drainage, tempera-

ture, etc.; varieties of soils adapted to different crops; fertilizers, etc. Implements and tools used on the farm and in the household, mechanical principles applied in their construction.

The atmosphere; its composition; combustion, simple experiments, study of candle flame products; changes produced in the air by respiration; reciprocal relation of plants and animals as regards the atmosphere; impurities in air.

Gravity; air and liquid pressure, the barometer. Cohesion and adhesion, the nature of these forces; phenomenon of solution and diffusion; amorphous and crystalline forms of matter. Practical use of heat, steam, and electricity in connection with the study of industries.

Form V.

READING.—Intelligent and intelligible natural reading. The principles learned incidentally. Exercises in breathing, articulation, and vocalization.

GRAMMAR.—The principles of etymology and syntax, including the logical structure of the sentence, and the inflection and classification of words. The elementary analysis of words, with the most important prefixes and suffixes and Latin and Greek root-words.

NOTE.—At first the work should be confined to a thorough review of the course prescribed for the fourth form, and the practical value of the subject in connection with English composition should be emphasized. The more reflective study should be taken up later. The use of English Grammar in teaching correct expression is, however, secondary to the insight it gives into the structure of our thinking and expression.

COMPOSITION.—Oral and written composition, chiefly narrative and descriptive. Letter writing. Oral and written reproductions or abstracts. Class debates. The systematic and careful application of the principles of good English to the correction of mistakes made by the pupils in speaking and writing. The main principles of composition (rhetoric) learned incidentally from the criticism of compositions, and systematized as the work proceeds.

LITERATURE.—Intelligent comprehension of suitable authors, both prose and poetry. Systematic oral reading in the class. Memorization and recitation of choice selections in prose and poetry.

NOTE.—(1) The object of the course is the cultivation of a taste for good literature, not by minute critical study, but by reading at home and in school, aloud and silently, with due attention to the meaning, standard works which will appeal to the interest and quicken the imagination of the pupil. Such works should be chiefly narrative, descriptive, and dramatic.

NOTE.—(2) In each of the forms three or four books (both prose and poetry) should be read each year as class-work. Part of such books should be read at home or during study periods, and reviewed in class with special reference to the more difficult passages. It is further recommended that, at the beginning of each school year, a short list be made out under a few heads of such suitable books as may be obtained in the school, public or other library, and that each pupil be required to read during the year at least one under each head, in addition to those taken up in class. The work in literature should be systematically correlated with that in oral and written composition.

HISTORY.—The leading events of the History of Canada, followed by an outline of British history. Supplementary reading and interesting biographical sketches of persons famous in Canadian and British history. The history of the locality. The elements of the civil government of Great Britain and Canada, and the duties of citizenship.

NOTE 1.—The main purpose of the course at this stage is to train the pupils to grasp the leading events in their logical order, and to arouse an interest in historical reading. As soon as practicable, a beginning should be made in appreciating the logical connection of events. Pupils should be trained to use the school, public, and other libraries for reference purposes and for supplementary reading.

NOTE 2.—The work in History should be systematically correlated with that in oral and written composition, and so much geography should be taken up as will secure intelligent comprehension of the topics dealt with.

ARITHMETIC AND MENSURATION.—*Arithmetic*—Review of principles; measures, multiples; the metric system; fractions (vulgar and decimal); contracted methods of computation; square root; percentage; commercial arithmetic, interest, discount, commission, etc. Mental arithmetic.

Mensuration.—The rectangle, the triangle, the parallelogram, the circle, the parallelopiped, the prism, and the cylinder.

NOTE. The processes and problems in the commercial work should be such as find direct application in ordinary business life. Accuracy, rapidity and neatness of work should be kept in view.

ALGEBRA.—Elementary work, factoring, highest common factor and lowest common multiple, easy simple equations, easy fractions.

GEOMETRY.—Definitions; fundamental geometric conceptions and principles; use of simple instruments, compasses, protractor, graded rule, set-square; measurement of lines and angles, and construction of lines and angles of given numerical magnitude; accurate construction of figures; some leading propositions in Euclidean plane geometry reached by induction as a result of the accurate construction of figures; deduction also employed as principles are received and assured.

NOTE.—The course should emphasize physical accuracy as well as accuracy of thought; exactness in drawing lines of required length, in measuring lines that are drawn, in constructing angles of given magnitude, and in measuring angles that have been constructed. Where desired, the course in Euclid (See Appendix C.), may be taken up.

GEOGRAPHY.—The building up of the earth, the modern earth, the ocean, the atmosphere, life on the earth, the heavens, commerce.

For the details of the course, see Appendix A.

NOTE.—Excursions should be made where possible and desirable, especially in connection with the study of rocks, minerals, soils and land formation of the district, and of the work of a stream, river or lake, all of which should be emphasized in due course.

ELEMENTARY SCIENCE.—An elementary course in Botany, Zoology, and Physics.

For the details of the course, see Appendix B.

NOTE 1.—The objects of the course are to train pupils in correct observation and deduction; to give, in connection with the instruction in Geography, a fair knowledge of the world around them to those who will remain at school only a year or so; and to lay the foundation for the more detailed study of each subject in the case of those who will continue the work. The spirit of the Nature Study of the lower forms should be retained, but the teacher should introduce a more systematic treatment of the subject with such organization of the material in Botany and Zoology as will lead to simple classification. The course should be correlated with Geography, Drawing, and Composition.

NOTE 2.—Under each of the sub-heads in Appendix B, full details are given of the courses. The order of the topics, however, is merely a suggested one. In Botany and Zoology, the extent and the character of the details of each topic are left to the principal and the teacher, and should be determined by the accessibility of the material and other local considerations. The course in these subjects should be practical throughout. Each pupil should possess a good lens and be taught how to use it. Approved methods of collecting and preserving botanical specimens and of keeping live animals suitable for study should be systematically followed. An herbarium and a museum of local specimens should be provided where practicable. The pupils should be encouraged to

provide specimens from the locality. Much of the practical work, especially the observations, will necessarily be done out of doors by the pupils alone, under the direction of the teacher, or by the pupils, conducted by the teacher. The course in Physics shall be experimental as far as possible, and the pupils should be encouraged to work at home and to prepare simple apparatus. The amount of the apparatus required is at the discretion of the Public School Inspector.

NOTE 3.—Books for reference and for supplementary reading should be provided in the school library. Systematic written descriptions and drawing should be required throughout the course, and the exercises should be dated and presented for comparison and inspection, the work being systematically supervised by the teacher. In none of the science subjects shall notes be dictated by the teacher.

ART.—Course of Form IV. continued. Drawing from models in light and shade, and color. Memory drawing in both outline and shade. Simple principles of freehand perspective.

COMMERCIAL SUBJECTS.—*Book-keeping and Business Papers.* Single entry and double entry. Use of journal-day-book, cash-book, bill-book, and ledger. Receipts, promissory-notes, drafts, orders, due-bills, deposit-slips, checks, bills, invoices, accounts; indorsement and acceptance and consequent liability.

Stenography.—The theory. Dictation, transcription.

Writing.—Correct position and movement; principles of letter-formation; graceful, legible business hand, etc.

Typewriting.—Copying documents, transcription of shorthand notes, manifolded, letter-press copying. Touch system recommended.

AGRICULTURE, MANUAL TRAINING, AND HOUSEHOLD SCIENCE. By direction of the Board, and with the concurrence of the inspector and with a programme and a time-table approved by him, a short course in Agriculture may be taken up, chiefly in connection with suitable topics under Geography and Elementary Science. For suggestive details, see the High School Special Lower School Course in Agriculture. Under the same conditions courses may also be provided in Manual Training and Household Science. For suggestive details, see the High School Special Lower School Courses in these subjects.

SCHEDULE II.

HIGH SCHOOL PROGRAMME OF STUDIES.

General.

MANNERS AND MORALS.—Throughout the High School course the teacher should incidentally, from current incidents, from lessons in literature, history, etc., occasionally by anecdotes and didactic talks, and by his own example as well as by precept, seek to give instruction in moral principles and practices and in good manners.

The following outline is suggested :—

Duties to oneself : Purity, health, nobility, self-control, self-reliance, generosity, truthfulness, good taste in dress, cultivation of will power, economy, moral value of work, etc.

Duties in school to teachers and to fellow pupils :—Obedience, punctuality, neatness, order, etc.

Duties in the home : Respect for parents, consideration for brothers and sisters, the weak, the aged, etc.

Duties to the lower animals : Kindness, etc.

Duties to the people generally : Honesty, courtesy, charity, toleration, justice, etc.

Duties to our country : Patriotism, courage, honor, obedience to law, etc.

Manners : Proper conduct at home, at school, on the street, and in public places, at social gatherings, etc.

PHYSICAL CULTURE.—Throughout the High School course, a systematic and well-developed course of exercises in Drill and Calisthenics, both free and with apparatus, and in Gymnastics, when practicable, should be taken up in each of the sub-divisions (See Reg. 41.) While dependent to some extent upon the accommodations and equipment, the exercises should always be suitable in character and frequency to the age and physical condition of individual pupils. The main object of the course is the symmetrical development of the body, securing at the same time strength and grace with correct and prompt obedience to the will. School games and sports should be systematically encouraged.

Lower School.

READING.—Intelligent and intelligible natural reading. The principles learned incidentally. Exercises in breathing, articulation, and vocalization.

ENGLISH GRAMMAR.—The principles of etymology and syntax, including the logical structure of the sentence and the inflection and classification of words. The elementary analysis of words, with the most important prefixes and suffixes and Latin and Greek root-words. An elementary knowledge of the formation of the sounds of the language, with their representation by means of the alphabet. An outline of the history of the development of the language.

NOTE.—The use of English Grammar in teaching correct oral and written composition, though important especially when the principles of good English can be intelligently applied, is secondary to the insight it gives into the structure of our thinking and expression. For the first year the work should be confined to a thorough review and slight extension of the course prescribed for the fourth form of the Public Schools, and the practical value of the subject in connection with English composition should be emphasized. The intensive and more reflective study should be reserved for the later years of the course.

ENGLISH COMPOSITION.—Oral and written composition, chiefly narrative and descriptive. Letter writing. Oral and written reproductions or abstracts. Class debates. The systematic and careful application of the principles of good English to the correction of mistakes made by the pupils in speaking and writing. The main principles of composition (rhetoric) learned incidentally from the criticism of the compositions, and systematized as the work proceeds.

ENGLISH LITERATURE.—Intelligent comprehension of suitable authors, both prose and poetry. Systematic oral reading in class. Memorisation and recitation of choice selections in prose and poetry.

NOTE 1.—The object of the course in the Lower school is the cultivation of a taste for good literature, not by minute critical study, but by reading at home and in school, aloud and silently, with due attention to the meaning, standard authors whose words will quicken the imagination and present a strong element of interest. Such authors should be chiefly narrative, descriptive, and dramatic.

NOTE 2.—In each of the forms, three or four books (both prose and poetry) should be read each year as class work. Part of such books should be read at home or during study periods, and reviewed in class with special reference to the more difficult passages.

It is further recommended that, at the beginning of each school year, a short list be made out for each form, under a few heads, of such suitable works as may be obtained in the school, public, or other library, and that each pupil be required to read during the year at least one under each head in addition to those taken up in class. The work in Literature should be systematically correlated with that in oral and written composition.

HISTORY.—The leading events of the history of Canada, followed by an outline of British history. Supplementary reading and interesting biographical sketches of persons famous in Canadian and British history and in Greek and Roman history. The history of the locality. The elements of the civil government of Britain and Canada, and the duties of citizenship.

NOTE 1.—The main purpose of the course at this stage is to train the pupils to grasp the leading events in their logical order, and to arouse an interest in historical reading. As soon as practicable, a beginning should be made in appreciating the logical connection of events. Pupils should be trained to use the school, public, and other libraries for reference purposes and for supplementary reading.

NOTE 2.—The work in History should be systematically correlated with that in oral and written composition, and so much geography should be taken up as will secure intelligent comprehension of the topics dealt with.

ARITHMETIC AND MENSURATION.—*Arithmetic*—Review of principles; measures, multiples; the metric system; fractions (vulgar and decimal); contracted methods of computation; square root; percentage, interest, discount, commission, insurance, stock, exchange. Mental arithmetic.

Mensuration.—The rectangle, the triangle, the parallelogram, the circle, the parallelepiped, the prism, the cylinder.

NOTE.—The processes and problems in the commercial work should be such as find direct application in ordinary business life. Accuracy, rapidity, and neatness of work should be aimed at. Proofs of the more difficult formulæ in mensuration are not required. During the first year the study of Arithmetic should be an intensive one, the work of the Public Schools being thoroughly reviewed. After the first year the stress should be placed upon Algebra.

ALGEBRA.—Elementary work; factoring; highest common factor and lowest common multiple, fractions; simple equations of one, two and three unknown quantities; square root, cube root.

GEOMETRY.—Definitions; fundamental geometric conceptions and principles; use of simple instruments, compasses, protractor, graded rule, set-square; measurement of lines and angles, and construction of lines and angles of given numerical magnitude; accurate construction of figures; some leading propositions in Euclidean plane geometry, reached by induction as the result of the accurate construction of figures; deduction also employed as principles are reached and assured. The course in Euclid begun.

For the details of the course in Euclid, see Appendix C.

NOTE.—The introductory course in Practical Geometry, which is intended to be a six months' one, should emphasize physical accuracy of thought, exactness in drawing lines of required length, in measuring lines that are drawn, in constructing angles of given magnitude, and in measuring angles that have been constructed. The course in Euclid retains his common notions, regarding them from modern standpoints.

LATIN AND GREEK.—The elementary Latin book, including introductory work in the prose authors. The Greek book begun in the second year.

NOTE.—Throughout the courses in Latin and Greek, the main objects should be accuracy of knowledge of forms and syntax, accuracy of translation into idiomatic English and the ability to translate at sight. Attention should also be given to pronunciation and reading aloud, and to the consideration of Latin and Greek words as the roots of English words.

FRENCH AND GERMAN.—The elementary French and German books, including introductory work in authors.

NOTE.—The work in French should at first be wholly without a text book, for the training of the ear and tongue; grammar learned incidentally. Names of common objects, states, and actions. Memorization of suitable selections from simple poetry. Reading anecdotes, short stories, and easy descriptions, with oral drill on the material read. After three or four months the systematic study of the elementary book should be begun, the work being chiefly oral. German should be begun in the same way the second year, but with greater apportionment of time, and more rapid progress. When desired, German may be begun first, being followed by French.

GEOGRAPHY.—The building up of the earth, the modern earth, the ocean, the atmosphere, life on the earth, the heavens, commerce.

For the details of the course see Appendix A.

NOTE.—Excursions should be made where desirable, especially in connection with the study of rocks, minerals, soils, and land formation of the district, and of the work of a stream, river or lake, all of which should be emphasized in due course. Books of travel and other supplementary reading in geographical subjects should be supplied; also, when practicable, exhibits of the material and products characteristic of the countries studied. The school lantern should be used for illustration.

ELEMENTARY SCIENCE.—An elementary practical course in Botany, Zoology, Physics, and Chemistry.

For the details of the course, see Appendix B.

NOTE 1.—The objects of the course are to train pupils in correct observation and deduction, to give, in connection with the instruction in Geography, a fair knowledge of the world around them to those who will not remain at school more than a few years, and to lay the foundation for the more detailed study of each subject in the case of those who will continue the work into the higher forms. The spirit of the Nature study of the Public Schools should be retained, but the teacher should introduce a more systematic treatment of the subject, with such organization of the material as will lead to simple classification and generalization. The course should be correlated with Geography, Drawing, and Composition.

NOTE 2.—Under each of the subheads in Appendix B, full details are given of the course, which is intended to be at least a two years' one. The order of the topics, however, is merely a suggested one. In Botany and Zoology, the extent and the character of the details are left to the principal and the teacher, and should be determined by the accessibility of the material and other local conditions. The courses in these subjects shall be practical throughout. Less attention should be given to the identification of plants than has hitherto been usual, and more to morphology, physiology, and ecology. When desirable, the agricultural applications of the subject should be emphasized. Each pupil should possess a good lens, and be taught how to use it. The compound microscope should be used regularly by the teacher for illustration. Approved methods of collecting and preserving botanical specimens and of keeping live animals suitable for study should be systematically followed. Much of the practical work, especially the observations, will necessarily be done out of doors by the pupils alone, under the direction of the teacher, or by the pupils conducted by the teacher.

The course in Physics and Chemistry shall be as far as possible experimental, and the pupils should be encouraged to work at home and to prepare simple apparatus.

NOTE 3.—When practicable there should be an aquarium, and every school should have an arboretum and a herbarium. A museum consisting of specimens illustrative of the courses should also be established. The pupils should be encouraged to provide specimens from the locality.

NOTE 4.—Floras and faunas should be provided in the library; also other works of reference, and the pupils should be encouraged to use them as supplementary reading, never as text-books or as substitutes for original work. Drawing and systematic written description should be required throughout the course, and the specimens should be dated and preserved in note books for comparison and inspection, the work being systematically supervised by the teacher. In none of the Science classes shall notes be dictated by the teacher. Every pupil should keep a calendar of the dates of (a) the unfolding of buds, (b) the flowering of plants, and (c) the first appearance of birds, insects, and other animals.

Some valuable publications on the subject of Nature Study and Elementary Science may be obtained free by teachers on application to the Department of Agriculture, Toronto.

ART.—Drawing from models in light and shade and in color. Memory drawing in both outline and shade. Simple principles of freehand perspective. Inventive illustrative drawing. Ornamental design, using outline and color, and introducing practical geometry and its application to design. Orthographic projection of type-forms and common objects. Isometric projection.

NOTE.—The course is intended to be a two years' one.

COMMERCIAL SUBJECTS.—*Bookkeeping and Business Papers.* Single entry and double entry. Use of journal day book, cash book, bill book, and ledger. Receipts, promissory notes, drafts, orders, due-bills, deposit slips, checks, bills, invoices, accounts. Indorsement and acceptance, and consequent liability.

NOTE.—A minimum amount of two Double Entry sets and one Single Entry set, of about ten pages each, should be carefully worked out by each pupil in the course. Such sets should be the first work done in these sets, not copies of preliminary drafts. The course is intended to be a six months' one.

Stenography.—The theory. Dictation and transcription.

Writing.—Correct position and movement; principles of letter formation; graceful legible business hand.

Typewriting.—Copying documents, transcription of shorthand notes, manifolding, letter press copying. Touch system recommended.

Middle School.

ENGLISH COMPOSITION.—Courses of the Lower School in oral and written narration and description continued. Exposition. Letter writing. Oral and written reproduction or abstracts. Class debates. The study of models of prose writing systematically taken up towards the close of the course.

NOTE. The Debating and the Literary society should supplement the work in this subject.

ENGLISH LITERATURE.—The intelligent and appreciative study of authors, both prose and poetry, including those prescribed for pass junior matriculation into the University of Toronto. Systematic oral reading in class. Supplementary reading provided by the pupils themselves and supplied from the school and the public or other library. Memorization and recitation of choice passages from the prescribed authors.

NOTE.—At this stage, the pupils should be able to begin to appreciate literature as such. Besides works of the same character as those taken up in the Lower School, other works of a subjective character may be added. The purpose and the spirit of the author and the merits of his thoughts and style should now be moderately dealt with; his defects should not be emphasized. The chief object is still the cultivation of a taste for good literature, and the authors should be read partly in class and partly at home, both silently and aloud.

HISTORY.—*British History.* Great Britain and Canada from 1763 to 1885, with the outlines of the preceding periods of British History.

Ancient History.—General outlines of the history of Greece to the fall of Corinth, and of the history of Rome to the death of Augustus, with a brief outline of the art, literature, philosophy, and social life of the Greeks and the Romans.

The geography relating to the British and the Ancient History.

NOTE. 1.—The details of the political history are not so important as the causes and the consequences of events, and the social life, literature, art, etc., of the peoples. In British, (including Canadian) history the development of our political institutions should receive special attention.

NOTE 2.—As in the Lower School the work in History should be correlated with that in oral and written composition as well as in geography. Although not prescribed for the Middle School course or for any of the examinations, it is recommended that the beginnings of civilization and of the Eastern nations be studied in outline before the periods prescribed in Ancient History are taken up. The great contemporary movements in the history of Europe should also be briefly discussed.

ALGEBRA.—The course in the Lower School reviewed and continued. Indices, surds; quadratics of one and two unknown quantities, the relation between their roots and co-efficients.

GEOMETRY.—The course in the Lower School reviewed. A selection of the leading propositions of Euclid but with modifications in method of proof. Exercises and deductions on the propositions of the syllabus, the constructions in Practical Geometry being such as naturally spring from the course in Geometry prescribed for the Middle School.

For the details of the course see Appendix C.

LATIN AND GREEK.—Course in the Lower School continued. The special study of the texts prescribed for pass junior matriculation into the University of Toronto, with sight work.

FRENCH AND GERMAN.—Course in the Lower School continued. The special study of the text prescribed for the pass junior matriculation into the University of Toronto, with sight work.

CHEMISTRY.—Course of the Lower School continued. Experimental illustration of the most important properties of Hydrogen, Chlorine, Oxygen, Sulphur, Nitrogen, Carbon, and their chief compounds, especially those of economic and industrial importance. Mixtures, solutions, chemical compounds, elements. Nomenclature. Laws of chemical combination. Combining weights, chemical formulæ and equations, with easy numerical examples.

PHYSICS.—Lower School courses reviewed. An experimental course defined as follows:

Heat.—Nature and sources of heat; thermometers; maximum density of water; relation between volume and the temperature of a gas (Charles' Law); absolute temperature; change of state; latent heat, specific heat; mechanical equivalents of heat, transmission of heat; simple problems.

Electricity.—Magnetism, laws of magnetic attraction and repulsion, phenomena and theories of magnetic induction, inclination and declination of the compass; chemical effects of the electric current, electrolysis of dilute acids and metallic salts, electroplating, electrotyping; storage cells; voltmeters and principle of their use; current induction and its general laws; transformer; induction coil; direct current dynamo; telephone, motor; simple notions of potential; Ohm's Law, shunts; electrical units; astatic and tangent galvanometers; rheostat, experimental determination of current strength, resistance, electromotive force; best arrangement of electrical generators under given conditions, the joule and the watt.

Sound.—Caused by vibrations; illustration of vibrations, pendulums, rods, strings, membranes, manometric flames, plates, columns of air, propagated by waves; its velocity; determination of velocity: pitch; standard forks, acoustical $C = 512$, musical, $A = 870$; intervals; harmonic scale; diatonic scale; equally tempered scale, vibration of air in open and closed

tubes, with wave-length; resonators; nodes and loops; vibrations of strings and wires; reflection of sound.

Light.—Rectilinear propagation; image through a pin hole; beam; pencil; photometry; shadow and grease-spot photometers, reflection and scattering of light; laws of reflection; images in plane mirrors; multiple images in inclined mirrors; concave and convex mirrors; drawing images; refraction; laws and index of refraction; total reflection; path through a prism; lenses; drawing image produced by a lens; simple microscope; dispersion and color; spectrum; recombination of white light.

Upper School.

ENGLISH COMPOSITION AND RHETORIC.—Middle School course continued. Argumentation. Course still both oral and written. Letter writing. Class debates. Critical study of prose models. The principles of rhetoric systematically studied.

NOTE.—As in the Middle School, the Debating and the Literary Society should supplement the work in this subject.

ENGLISH LITERATURE.—The intelligent and appreciative study of authors, both prose and poetry, including those prescribed for honor junior matriculation into the University of Toronto. Systematic oral reading in class. Supplementary reading provided by the pupils themselves and, as in the Lower school, from the school and the public library. Memorization and recitation of choice passages from the prescribed authors.

NOTE.—At this stage the pupil should be able to read literature still more appreciatively; but the chief object continues to be the cultivation of a taste for good literature, and critical study should be subordinated thereto.

HISTORY.—*Mediæval and Modern History*.—A brief outline.

British History.—From the Discovery of America to 1763.

For the details of the courses in Mediæval and Modern History, see Appendix D.

NOTE.—The subject should be dealt with as in the Middle School, but here, in particular, the comparative method should also be employed as far as practicable. The continuous history of Great Britain and Ireland and of the colonies should be taken up concurrently with that of the other European States. It is recommended that in connection with English composition, each pupil should select one or more topics to which he will devote special attention, utilizing for the purpose the books of reference available in the school, public, and other libraries.

ALGEBRA.—Work of Middle School continued. Theory of divisors, ratio, proportion and variation, progressions, scales of notation, permutations and combinations, binomial theorem, interest forms, annuities, and sinking funds.

GEOMETRY.—The course in Geometry of the Middle School reviewed and continued. An introductory course in Co-ordinate Geometry of the point, the straight line, and the circle.

For the details of the course, see Appendix C.

TRIGONOMETRY.—Trigonometrical ratios with their relations to one another; sines, etc., of the sum and difference of angles with deduced formulæ. Use of Logarithms. Solution of triangles. Expression for the area of triangles. Radii of circumscribed, inscribed, and escribed circles.

LATIN AND GREEK.—Course of the Middle School in grammar and composition continued. The special study of the authors prescribed for honors at matriculation into the University of Toronto, with sight work.

FRENCH AND GERMAN.—Course of the Middle School in grammar and composition continued. The special study of the authors prescribed for honors at matriculation into the University of Toronto, with sight work.

PHYSICS.—An experimental course defined as follows :—

Mechanics.—Measurement of velocity ; uniformly accelerated rectilinear motion ; metric units of force, work, energy, and power ; equilibrium of forces acting at a point ; triangle, parallelogram, and polygon of forces, parallel forces : principle of moments ; centre of gravity ; laws of friction ; numerical examples.

Hydrostatics.—Fluid pressure at a point ; pressure on a horizontal plane ; pressure on an inclined plane ; resultant vertical pressure, and resultant horizontal pressure, when fluid is under air pressure and when not ; transmission of pressure ; Bramah's press ; equilibrium of liquids of unequal density in a bent tube ; the barometer ; air pump ; water pump, common and force ; siphon.

NOTE.—The course in Electricity for the honor junior matriculation into the University of Toronto is included in the Middle School course. Special class provision may, however, be made for the subject in the Upper School.

CHEMISTRY AND MINERALOGY.—An experimental course defined as follows :—

Chemistry.—Chemical theory of the Lower School reviewed and continued. Chemical and physical reactions, rates of reactions, reversible reactions, chemical equilibrium. The practical study of the following elements, with their most characteristic compounds, having regard to Mendelejeff's classification of the elements, and some of the most important economic and industrial applications : Hydrogen, Sodium, Potassium, Magnesium, Zinc, Calcium, Strontium, Barium, Boron, Aluminum, Carbon, Silicon, Tin, Lead, Nitrogen, Phosphorus, Arsenic, Antimony, Bismuth, Oxygen, Sulphur, Fluorine, Chlorine, Bromine, Iodine, Manganese, Iron, Copper, Nickel.

Mineralogy.—General chemical composition of the earth's crust. Meaning of term mineral : crystalline state of matter ; physical character of minerals, hardness, streak, lustre, specific gravity, studied from actual specimens. Meaning of terms, rock, ore. The rock-forming minerals, Calcite, Quartz, Orthoclase, Plagioclase, Muscovite, Biotite, Hornblende, Pyroxene, Olivine, studied from hand specimens. Examination of hand specimens of the following rocks :—Igneous—Granite, Syenite, Diorite, Gabbro, Diabase, Basalt Aqueous—Sandstone, Conglomerate, Shale, Limestone. Metamorphic—Marble, Gneiss, Slate, Schists. Veins—kinds, how formed, how filled.

Determination with the aid of simple mineral tables of the following : Magnetite, Hematite, Pyrite, Galena, Gypsum, Halite, Graphite, Mispickel, Pyrolusite, Stibnite, Zinc blende, Chalcopyrite. Occurrence of gold, silver, coal. Chief deposits of economic minerals in Canada.

NOTE 1.—The Lower School course in Geology (under Geography) should be reviewed in connection with the study of the minerals.

NOTE 2.—Many of the minerals in the above list can be found in any well developed gravel pit, a stone pile, or the glacial boulders scattered widely over Ontario. Pupils should be required to make excursions in the neighborhood of the school for the purpose of obtaining them and observing the geological formations.

NOTE 3.—The determination of the minerals shall be made by observation of their physical properties and by means of the blow-pipe.

BIOLOGY.—*Zoology.*—The practical study of the external form and of the prepared skeleton of the various types prescribed. Prepared dissections and, where necessary, models shall be used to convey an elementary knowledge of the internal structure of the types. The pupil must sketch such preparations to ensure his careful study of them.

The Fish : Any one of the common fresh water fishes of Ontario ; special attention to the organs of locomotion, circulation, respiration. As several species are easily obtainable, this class may be employed for studying the principles of zoological nomenclature.

The Frog : Comparison with the fish as to the organs above mentioned. Observation of the development of the spawn of one or more Amphibia.

The Reptile : A turtle and a snake. Comparison of both with a lizard.

The Bird : Special attention to the plumage, the bill and feet, and of the modifications of the skeletal, muscular, and respiratory systems in connection with aerial life. Study of birds in relation to agriculture.

The Mammal : Characters of the chief domesticated and wild mammals of Ontario, as well as the main facts of internal structure of one of the smaller forms (*e. g.* the rabbit). Comparison of the teeth and feet of the pig, horse, sheep, rabbit, dog, mole, bat.

The crayfish as a type of the arthropods. Comparison of the external form of the crayfish with that of an insect (*e. g.* grass hopper, cricket, cockroach), also with that of a millipede and a spider. Insects injurious to vegetation ; the methods of combatting their attacks.

Unsegmented and segmented worms.

Fresh-water mussel and snail.

A fresh-water unicellular animal, such as an Amoeba or Paramecium.

The natural habits of the various animals studied.

A general view of classification based upon comparison of the types studied.

NOTE.—When preferred, dissection of types may be substituted for the use of models and prepared specimens.

Botany.—The practical study of representatives of the flowering plants of the locality in which the school is situated, and representatives of the chief sub-divisions of cryptogams, such as a fern, a lycopod, a horsetail, a liver-wort, a moss, a lichen, a mushroom and a chara with a general view of classification. An elementary knowledge of the microscopic structure of the bean and the maize. Drawings and descriptions of parts of plants, and classification. Comparison of different organs, morphology of root, stem, leaves, hair, parts of the flower ; reproduction of flowering plants, pollination, fertilization and the nature of fruits and seeds. Laboratory course in plant physiology, with studies of protoplasm, osmosis, absorption of food material ; culture fluids, transpiration, digestion, respiration, growth, and movement. Common economic fungi (a collection to be made) with further study of fungous diseases.

NOTE.—A Museum is a necessary adjunct of the study of Biology. See note (3) under Elementary science of the Lower School.

Special Lower School Courses.

NOTE.—The following courses are to be taken up only when the staff, the equipment, and the accommodations are adequate.

Principals and School Boards may modify the details to suit the requirements of their localities, subject to the approval of the Minister of Education. See Reg. 39 (3) and (6).

I. COMMERCIAL SUBJECTS.

First Course.

BOOK-KEEPING.—Single entry and double entry. Use of journal, day book, cash book, bill book and ledger, the first two as books of original entry, and cash books with special columns for merchandise on the debtor side and for expenses on the creditor side ; transactions, including discounts and renewals of notes and drafts, trade discounts, deposits in banks and the use of checks ; changing from single entry to double entry, and from double entry to single entry ; sets in simple partnership ; statements of assets and liabilities and of profit and loss.

BUSINESS PAPERS.—Receipts, promissory notes, chattel notes, drafts, bills, invoices, credit invoices, accounts, monthly statements, financial statements, indorsement and acceptance and consequent liability.

PENMANSHIP.—Correct position and movement ; principles of letter formation ; graceful, legible business hand ; ledger headings ; figures ; letter writing ; addressing envelopes and parcels.

TYPEWRITING.—Copying documents, transcription of shorthand notes, tabular work, manifolding, letter press copying. Touch system recommended.

STENOGRAPHY.—The theory. Dictation and transcription.

Second Course.

BOOK-KEEPING.—Single entry and double entry, and changing from one system to the other. Use of journal day book, invoice book, sales book, cash book, bill book and ledger, the first five as books of original entry ; use of journal and cash book with various special columns ; manufacturing, using time sheet and pay roll ; commission business, shipments, consignments ; banking, including deposits, withdrawals, discounts, collections ; partnership and the sharing of profits and losses by various methods ; practical treatment of freight, duties, discount, bank and bad debts accounts ; division of merchandise and expense accounts into various departments. Financial statements ; assets and liabilities, profit and loss, trading account, income and expenditure, receipts and disbursements, comparative statements.

BUSINESS AND BUSINESS LAWS.—Forms of the first year, together with deposit receipts, warehouse receipts, lien notes, shipping bills, bills of lading, proxies, power of attorneys, time sheets, pay rolls, bank pass books, account sales.

Negotiable paper ; discharge, dishonor and protest ; negotiability and assignability ; accommodation paper ; statute of limitations ; statute of frauds ; money ; interest ; banking organization ; business, note issue ; partnership ; crossed checks ; collections of accounts ; balance of trade, meaning and effect on exchange ; liability as partners and shareholders ; contracts—kinds, legality, parties, consideration ; insurance, kinds of policies, duties of the insured ; chattel mortgages and mortgages on real estate, definition, registration, limitation, assignment, discharge ; searching the title of lands.

WRITING.—Course of the first year continued ; acquisition of speed ; marking boxes, barrels, etc.

STENOGRAPHY.—Course of the first year continued. Speed of 60, 80 and 100 words per minute ; transcription at the rate of 15 words per minute should be attained.

TYPEWRITING.—Copying documents, transcription of shorthand notes, tabular work, manifolded, letter press copying. Touch system recommended.

NOTE.—The commercial subjects, as outlined above, are intended to cover two years' work, with a minimum of a general education. If a good course is taken in English, mathematics, and science, with one or more of the languages added, the work should extend over three years.

Special provision may be made for commercial French and German, and Geography.

II. AGRICULTURE.

REQUIREMENTS.—1. *Experimental plots*; 2. *School garden*; 3. *Arboretum*; 4. *Science laboratory*.

First Course.

1. **THE SOIL.**—Kinds of soil; heavy and light; warm and cold, sandy, clay, loamy, and humus; glacial, alluvial, marsh and residual characteristics of each, and the way each is formed. Local excursions for the study of soils.

SOIL WATER.—Uses of water in the soil; water capacity of different soils; capillarity and its importance; percolation of rain water; conservation of soil moisture and methods of conserving moisture; drainage and importance of removal of stagnant water.

FOOD MATERIALS IN THE SOIL.—How Roots absorb; osmosis; relation of air to soil; need of air to roots; experiments in laboratory and in the plots.

2. **THE PLANT.**—The parts of the plant and their relations to the soil; light, and air; functions of the root, stem and leaf; germination of seeds of the common garden and farm plants, and the growth of the seedlings, propagation of plants by seeds, budding and grafting; fruits and seeds; weeds and weed-seeds.

How plants feed; air and soil food materials; photosynthesis; storage of plant food in various farm plants; annuals, biennials, and perennials of the farm.

The making and keeping of a garden; selection of seed and planting in experimental plots.

Second Course.

1. **THE SOIL.**—The First Course continued; Analysis of soils; the peculiar soil-properties which affect plant growth. Texture, coarse, open, loose, fine, hard, compact, stiff, mellow, porous, lumpy, rententive, leachy, etc. Tillage, different methods for different soils and climate; improvement of soils. Plant food in the soil; rotation of crops and the food requirements of each crop; systems of rotation; underdrainage; bacteria in the soil.

2. **THE PLANT.**—The First Course continued. The botany of the crops of the farm; the uses of the different crops; how harvested; how planted; good and poor seed and importance of selection of good seed; grasses and forage crops, their value and identification; vegetable crops; plant diseases. Forestry on the farm, and the common trees and shrubs; leguminous crops and their special value.

3. **THE ANIMAL.**—Resemblances and differences between plants and animals; physiology of animals; feeding and digestion; rations; breeds; poultry; excursions to stock farms in vicinity; care of animals, ventilation of stables; bacterial diseases.

III. MANUAL TRAINING.

No detailed course of study is prescribed. The following prescription of the character of the work should, however, be followed:—

1. **MODELS.**—In drawing up a set of models, exercises, or projects for any school, attention should be given to the following points:—

(1) The course should be suitable to the district and should have special reference to its occupations and industries.

(2) The models should be graduated in order of the difficulty of the tool operations necessary for their completion.

(3) Due provision should be made to allow of the expression of the individual thought of the student.

(4) The work should have a close and intimate relation to the general work of the school.

(5) When formulated, the course should not be regarded as fixed and final; but, from time to time, such changes should be made as greater experience and knowledge may render advisable.

(6) Each exercise should be capable of being performed wholly by the student, and the teacher should never apply a cutting tool to the model on which the boy is actually at work.

(7) The form and proportion of each model should be carefully studied, attention being paid to grace and beauty as well as utility.

(8) The course should be based upon exercises and not upon models. This will lead to variety, and the pupil may make any model he chooses provided it contain the exercises the teacher wishes him to learn.

2. **WORKING DRAWINGS.**—Particular attention should be paid to the preparation of working drawings by the pupil. These should be either full size or on a fairly large scale. Orthographic projections and isometric views should be used, and an exercise should not be commenced unless a fully dimensioned drawing has been made or is being made concurrently with the bench work. Correctly dimensioned drawings of various objects, of which the students themselves should take the measurements; freehand dimension sketches, to be afterwards transferred into working drawings, afford useful practice. Freehand sketching should also be used in making drawings of leaves, tree sections, tools, etc., and in completing curved portions of working drawings. In the more advanced classes, tracings and blue prints should be made.

A course in mechanical drawing should not be entirely restricted to the shop work exercises, as their natural order and sequence will not provide sufficient variety for the range of work necessary to give a grasp of the subject and its application to industrial pursuits. Practice should be given in the reading of drawings until they can be interpreted with accuracy and facility. Work in drawing must be done from the object. Great attention should be paid to lettering and dimensioning. The cultivation of the art of sketching an idea rapidly, to be afterwards worked out, will prove of immense benefit. Each pupil should use a note book; and the use, care, and adjustment of the various instruments should be carefully taught.

3. **MATERIALS.**—Clear ideas should be acquired respecting the materials used, *e. g.*:—The growth, structure and uses of different varieties of timber; its felling, seasoning, and conversion; warping, twisting, and checking, how caused and how counteracted; the nature and uses of the common iron ores; important iron and steel processes, etc. Various methods of finishing should be shown.

4. **WORK IN WOOD AND METAL.**—The practical work in wood or metal should consist of a series of models or exercises carefully graduated so as to

teach the fundamental processes employed in working from the rough material to the finished product. The proper use of nails and screws should be explained and practised, and the various methods of jointing used in constructive work. Models need not be confined to one material; combinations of wood and metal even in the same model often afford useful exercises. While the expression of the individual thought of the pupil may show itself in the formation of useful articles, it is not intended that the Manual Training room be turned into a workshop for the manufacture of school apparatus.

5. **CONSTRUCTION AND USE OF TOOLS.**—The construction and mode of use of the tools employed should be shown, and demonstrations illustrating the proper methods of sharpening and keeping them in good order should be given systematically throughout the course. Pupils should themselves be required to sharpen the edged tools they use, and the proper method of correcting errors in tools of precision such as winding strips, square, face-plate, and the turning of an oil or grindstone, etc., should also be shown and practised.

6. **LATHE WORK.**—Schools that possess lathes may alternate this work with ordinary bench work, and the products of the lathe should be used in the building up of articles made at the bench. A correct understanding of the accompanying tools, the shape they should take, and the condition they should be in for accomplishing the best work should be given. The models should be designed with a view to acquainting the pupils with the methods of turning and finishing both hard and soft woods and metals, and the principles involved in face-plate turning and turning between centres. The use of the various lathe attachments and change wheels should be shown, and the different velocities necessary for various purposes clearly explained.

7. **METAL WORKING.**—Metal may be worked either hot or cold. Cold metal may take the form of bent iron work, and this may be graduated to suit the physical capacity of the pupils. In its more elementary forms the equipment necessary is simple and inexpensive, and the work may be made a valuable adjunct to the art teaching given in the school. The course in metal work should give a general knowledge of the working of iron and steel and of the possibilities and limitations of metal working. Work in hot metal demands more extensive equipment. In forging, the preparation of the fire is most important and instruction should be given as to its building and keeping up. The most important tool in all forge work is the hammer and much attention should be paid to it. The fundamental operations in forging are few in number and may be taken up in the following order:—Drawing, bending, twisting, shouldering, upsetting, punching, welding, shaping, brazing, and, for decorative work, veining and modelling. Exercises in cold metal may be taken as follows:—Simple filing, soldering, chipping and filing, rivetting, scraping, and fitting. Various small tools can be forged and properly tempered for use in the lathe.

8. **DECORATION.**—As a general rule decoration should be applied only to models that are soundly constructed. Various methods of preparing stains and their use for different purposes should be dealt with. Indenting and stamping, groove carving, chip carving, flat carving, low relief and high relief may be employed according to the capacity of the pupil and the requirements of the object to be decorated. All schemes of decoration should first be sketched on paper or worked in clay. To stimulate originality, the unit may be given and the student encouraged to make new combinations, the copying of designs being as far as possible prevented.

9. **SYSTEM OF MEASUREMENT.**—Either system of measurement may be used, English or Metric ; but as, in all scientific work, the latter is coming into general use, it is advisable in the higher classes, at any rate, at least, to combine the systems.

NOTE 1.—In those cases where the pupil has not taken a course of constructive work in the Public School, the work will of necessity be of a simpler character than much of that suggested in the above scheme. Where possible a separate class should be formed of such pupils.

NOTE 2.—The graduates of each year should unite in constructing some piece of work to be left in the school as a memorial of the class.

IV. HOUSEHOLD SCIENCE.

First Year.

HYGIENE, SANITATION, AND COOKERY.—Personal hygiene, care of skin, clothing, physical habits, etc.; hygiene of the house, ventilation, location, sanitary surroundings.

Kitchen and its equipments, stoves, etc.: bed-room, bath-room, closets, etc.; household pests; disposal of waste. Food: its functions, classification, special value of each. Cooking: principles involved in the different methods employed, and application of these to different kinds of food.

Continuation of public school course Form IV. in cookery; preparation of meals, cost, time for preparation, planning and serving a meal within a given cost.

NEEDLEWORK.—All kinds of hand sewing, including buttonholes, patching and darning. Talks on implements used. Study of fabrics. Growth of cotton and flax. Cultivation of silk worm and processes of manufacture. Demonstration of primitive methods of weaving. Basting and running stitches, back stitch, half-back stitch, combination stitch, overcasting, overhanding on folded selvedge edges, true bias, matching stripes, plain hemming, French hemming, joining bias strips, straightway fell on flannel, herring bone stitch, gussets, gathers and stitched band, hemmed band, chain and feather stitch, hem stitch, loop stitch, blind loops, button-hole stitch, sewing on buttons, tapes, hemmed patch, overhand patch, flannel patch, slip stitch, stockinet darning, cashmere darning, mending from home and application of these stitches in making button bags, shoe bags, shoe holders, and in hemming towels, aprons, dressing doll.

BASKET AND RAFFIA WORK.—Source, kinds and use of wicker and raffia. Making of table mats, napkin rings, doll's hats, work baskets, porch mats, furniture beaters, etc.

Second Course.

HYGIENE, SANITATION AND COOKERY.—Review and elaboration of principles taught in the first year. Dietetics: preparation of food for invalids, diet for children, for infants, balanced rations. The house: furnishing with consideration of cost, comfort and good taste. Public hygiene; responsibility of the individual in prevention of disease. Home nursing and emergencies: furnishing and care of the sick room, making a bed, changing bed linen, bathing and care of a patient; ventilation of sickroom; treatment of burns, scalds, wounds, fainting, frost-bite, etc.; bandaging; administration of food and medicine; ferments; yeasts, mold, bacteria, etc.

LABORATORY WORK.—Food combinations, advanced cookery; serving and decoration of food; care of silver, brass, copper, nickel, marble, hardwood. Duties of the hostess in the entertainment of guests. Ethics of the home. Homemaking *versus* housekeeping, the home as a community. Relation of the home to the state. Influence of a well ordered home.

NEEDLE WORK.—Talks on materials suitable for underwear. Embroideries, laces, and other trimmings. Instruction in the use of patterns. Cutting, fitting, and making corset cover with French fell. Taking measurements and drafting pattern for drawers. Cutting out drawers. Making tucks and preparing the trimming. Putting tucks and insertion together. Gathering, stroking and putting on ruffles. Making French seams and placing placket gusset. Putting on yoke or band. Making button holes. Drafting pattern for skirt. Taking measurements, cutting, fitting and making night gown.

Threading, running, oiling, and cleaning of sewing machines. Use of attachments.

Application of sewing stitches in outlining, and Kensington stitch on doily or tray cover. Embroidering initials. Hemstitching. Fringing doily.

NOTE.—The course in Household Science is a two years' one; but, when the conditions render it desirable, it may be extended over a longer period.

Special Middle School Courses.

NOTE.—The following courses are to be taken up only when the staff, the equipment, and the accommodations are adequate. See Reg. 39 (3) :

I. ARITHMETIC AND ENGLISH GRAMMAR.

The following courses in Arithmetic and English Grammar are prescribed for candidates for Junior non-professional Public School certificates, in addition to the ordinary Lower School courses in these subjects :—

ARITHMETIC.—More extended and intensive study of the theory. Continuation of the work in commercial arithmetic, with annuities and equation of payments. Review of work in mensuration, with the pyramid, the cone, and the sphere; the derivation of the formulæ. Logarithmic computation.

ENGLISH GRAMMAR.—More extended and intensive study of the course of the Lower School.

II. ART SUBJECTS.

Principals and School Boards may modify the details of the following course in Art, to suit the requirements of their localities. See Reg. 39 (3) and (6) :—

Advanced drawing from flowers, drapery, and natural objects, in black and white and in water color. Pen and ink drawing for illustrating purposes. Ornamental drawing on blackboard. Out-door sketching from nature in pencil, charcoal, and water colors. History of art.

Charcoal drawing and painting ornamental casts and antique statues. Modelling in clay. Ornamental design. Elementary practical geometry as far as necessary for geometric designs. Drawing conventional flowers, leaves, rosettes, etc., based on natural forms. Designs for floor cloths, wall-paper, wood and iron work. Tinting designs in water colors. The principles of design and anatomy of pattern.

Practical geometry. Projection of points, lines, and solids. Parallel and angular perspective.

Machine drawing. Use of instruments. Drawing details, bolts, nuts, screws, gear wheels.

Architecture. Elementary architectural design and decoration, plans elevations, sections. Perspective architectural drawing in pen and ink and water colors. The different styles of architecture.

NOTE—The Art subjects may be continued, if desired, in the Upper School

APPENDIX A.

GEOGRAPHY.

Following are the details of the course in Geography prescribed for the Fifth Form and the Continuation classes of the Public Schools and for the Lower School of the High Schools :

Soil, stones, rocks, strata and their origin ; nebular theory : stratified, unstratified, metamorphic rocks ; elevation and depression of the crust of the earth, forming continents and oceans ; periods in the earth's history in relation to Canada and to Ontario in particular ; life on the earth, fossils. Forms and distribution of land masses, causes, theories regarding them ; changes in land forms ; agents of change, volcanoes, water, etc. Study of the common rocks, minerals and soils of the districts. Mountains, origin, growth, distribution, relation to mines, forests, and climate ; volcanoes and volcanic phenomena ; plains and plateaus—Canada generally, Ontario and the Northwest in particular ; relation of Canadian upheavals, subsidences, glaciation, moraines, gravel ridges, boulders and formations, to the continental areas of which they form a part.

Rivers and river valleys ; lakes ; coast features ; industrial importance of streams, rivers, lakes ; origin and growth of rivers, falls, and rapids, changes in courses with causes ; old river courses, depression and elevation ; erosion by rivers, transportation and deposition of sediment.

The ocean : Origin, distribution, depth, movements, currents, tides, waves, ocean bed, etc.

The atmosphere, composition, importance to life, aqueous vapor ; heating of the earth ; depth of atmosphere ; high and low pressure, the barometer, isobars, etc., movements of the air ; winds, their causes, trade winds, anti-trade winds, periodic, variable, cyclones, anti-cyclones, thunder storms, tornadoes ; clouds, rain, snow, dew, evaporation ; climate, causes affecting it ; former climatic conditions.

Life : Varieties, dependence upon climate, soil, etc. Plant life : typical forms in different zones, distribution ; marine plants, animal life ; typical forms, terrestrial, aerial, marine ; direct or ultimate dependence on plant life ; distribution of forms. Man : Varieties, distribution, relation to other animal life and to natural and physical conditions.

The earth as a planet ; the planets ; the fixed stars ; the celestial sphere ; observations of some of the more prominent constellations ; the solar system and its members : the earth, its size and shape, proofs of shape : circles on surface ; latitude and longitude ; zones ; daily rotation on axis : proofs ; day and night ; yearly revolution ; its orbit an ellipse ; perihelion, aphelion : seasons : variation in length of day and night, measurement of time ; unit of time ; sun-dial ; civil year ; standard railway time of Canada and the United States ; location of position by latitude and longitude : calculation of times and distances.

The moon : rotations ; phases ; different kinds of months ; various eclipses of the sun and moon ; umbra ; penumbra, appearance through a telescope ; absence of atmosphere, clouds, etc.

The sun : sun spots, solar heat, radiation, etc. Comets, meteors, nebulae, etc., their probable nature, number, revolutions, etc.; darkness and coldness of space.

Important commercial highways and their relations to centres of population. Natural and manufactured products of the countries of the world, with their exports and imports. Internal commercial highways of Canada and the chief internal commercial highways of the United States. Relation between industrial and commercial centres and physical features; relation of soil and underlying rock formations to the products of the district, and the occupations of the inhabitants. Water ways : their influence on population and settlement, their use as highways of commerce, with special reference to Canadian routes. Typical natural products of different zones. Commercial relations of Great Britain and her colonies, and of Canada and the United States. Forms of Government in the countries of the world and their relation to civilization. Relation between the characteristics of a people and their environment.

APPENDIX B.

ELEMENTARY SCIENCE.

Following are the details of the courses in Elementary Science. The first courses in Botany, Zoology, and Physics are prescribed for the Fifth Form of the Public Schools. Both the first and the second courses in Botany, Zoology, and Physics, and the course in Chemistry are prescribed for the Continuation Classes of the Public Schools and for the Lower Schools of the High Schools.

BOTANY.

First Course—September to November.

The structure and functions of flower, leaf, stem, root, etc.; organs of the flower, their functions, pollination, fertilization. Uses of hairs, spines, prickles, tendrils, and petioles. The simpler fruits and the means of dispersion of seeds. Formation of tree buds ; preparation for winter; annuals, biennials, perennials. The fall of fruits and leaves of deciduous and evergreen trees. The study and interpretation of the marks on trees and shrubs. Comparison of higher plants with higher animals ; relation of each to food ; means of obtaining and storing it ; dependence of animals on plants.

April to June.

Relation of plants to light, moisture and heat ; water as a solvent, circulation in plants, experiments ; soluble and insoluble material in soils ; importance of each class of material to the plant ; uses of roots and leaves in absorbing food from soil and air, experiments. Struggle for light and moisture, germination of the seed, development of the parts ; examples—bean, morning-glory, pumpkin, corn, wheat. The expanding of buds and the opening of the spring flowers. Objects of pruning trees, transplanting and thinning vegetables. Times of germination and flowering of com-

mon plants in their native situations. Propagation of offsets, runners, tubers, slips, seeds, grafts, budding. Conditions governing the growth of the early wild flowers. Modifications in plant growth suitable to environment. Plant societies in different localities. Identification of plants with regular flowers.

Second Course—September to November.

Morphology of the composites and grasses. Identification of the simpler ones.

Plant societies continued ; peculiarities of each which adapt it to its situation. Special study of weeds, means of controlling them. Morphology and habits of some typical ferns, as bracken fern, shield fern, moonwort, sensitive fern. Morphology and habits of a mushroom, a polypore, a boletus, a puff-ball. Parasitism and saprophytism. Study of plant enemies and remedial treatment—the simpler forms. Comparison of spring and autumn flowers. Comparative study of fruits. Special study of leaf, its modifications and adjustments for securing a favorable light position : its importance in obtaining and elaborating food material ; the part it plays in evaporation.

April to June.

Common orchard and forest trees. Special study of the coniferae ; the bud ; form, permanence and phyllotaxy of leaves, flowers ; comparison of twigs and wood with those of other trees. Comparative study of pith and cortical layers. Distinction between endogen and exogen. Meaning, significance, and methods of cross fertilization. Man's influence on plants. Plant physiology, elementary and experimental ; chlorophyll ; movements of gaseous and liquid nutriments and waste products. Morphology of complex inflorescences. Study of the fungi continued. Economic uses of plants, food, clothing, ornament, medicine, rubber, tea, spices, etc. General view and comparison of the characteristics of the larger classes of plants taken up in the course.

ZOOLOGY.

First Course—September to November.

Relations of insects to flowers. Study of grasshopper, potato-beetle, tomato-worm, house-fly, spider, centipede. The life history of at least two insects having complete metamorphoses. Collection of caterpillars infesting common plants, for observation of their metamorphoses. Recognition of some of our common birds ; the relation to their habits of the structure of bills, legs, feet, wings, and nests, the arrangement of toes, and the color of feathers and eggs (aquatic, terrestrial, aerial) ; times of their migrations.

April to June.

The life history of the frog. Continuation of the study of the birds ; especially in regard to their methods of obtaining food and nesting. Life history and habits of any common economic insects such as the tent-caterpillar, the cabbage-butterfly, the lady-bird, or other predacious beetle. Familiarity with the names and general appearance of the common fishes, frogs, newts, lizards, turtles, and snakes of the locality.

Second Course—September to November.

The mammalia, chief characteristics. Our native Canadian mammals, their adaptation to our climate, their coloration, docility, habits, food, enemies. Modifications for aerial life (bat, flying-squirrel), arboreal life (squirrel), subterranean (wood-chuck, mole), aquatic (beaver, muskrat). Herbivorous and carnivorous animals, peculiarities of each. Adaptation of the fish, the frog, the bird, the mammal, to their habits of life. Homologies of fins, scales, etc. Comparison of the teeth and integuments of a few typical animals. Adaptation of animals for securing food, avoiding enemies. Preparation of animals for winter.

April to June.

The food supply of birds and insects; those beneficial or injurious. Special study of the bills and feet of birds and of the mouths and wings of insects. Distinction between biting and sucking insects. Life-history of any two of the following: carpet-beetle, scale insects, saw-fly, codling-moth, mosquito, pea-weevil; rearing the insects to study their metamorphosis; observation of conspicuous orchard or garden pests of the season, with protective treatment of plants. Economic uses of animal products: silk, wood, fur, leather, etc. General view and comparison of the larger classes of animals taken up in the course.

PHYSICS.

First Course.—November to April.

Forms of matter; solids, liquids, gases; different states of the same kind of matter; crystalline and amorphous conditions; theory of constitution of matter. Physical and chemical change. Simple and compound substances. Metric units and standards of length, area, volume, weights, mass density; experiments in measurements with use of instruments, such as rule, balance, burette, caliper. Properties of solids. Properties of liquids; transmission of pressure by liquids; illustrations, construction and uses of hydraulic press. Relation of pressure to depth and density; pressure at a point equal in all directions; buoyancy and flotation. Properties of gases, weight, elasticity, atmospheric pressure, barometer; expansive force of gas, with applications, as air cushion, bicycle tire, football, compressed air motor, air gun, etc.; relation between the volume and the pressure of a gas (Boyle's law). Construction and use of air pump, common pump, free pump, condenser, (as bicycle pump); buoyant force of gases. Solution, diffusion; part played by these processes in nature. Specific gravity; common methods of finding specific gravities of solids, liquids, and gases.

Second Course.—November to April.

Experiments illustrating the transformation of other forms of energy into heat; experiments to illustrate the expansion of solids, liquids, and gases by heat; distinction between temperature and heat. Methods of measuring the change of temperature, with description of Centigrade and Fahrenheit thermometers; change of state, phenomena of fusion, ebullition, evaporation, liquefaction and solidification; latent heat; methods of transference of heat; conduction, practical methods of heat insulation,

principle of Davy's safety lamp, convection currents ; methods of heating and ventilating houses.

Lode-stone, magnetic attraction; magnetization and demagnetization, polarity ; magnetic induction; earth's inductive influence; construction and practical use of the mariner's compass and dipping needle ; geographical and magnetic poles ; construction of simple voltaic cells ; chemical effects of the electric current, decomposition of water by electricity ; magnetizing effects of the electric current ; the construction of an electro-magnet, with some of its more common practical applications, as electric bell, telegraph, and telephone ; heating and lighting effects of the current, arc and incandescent lamps.

Nature and propagation of sound ; principles of construction of some of the more common musical instruments, as piano, violin, harp, horn, and organ ; reflection of sound, echoes ; and musical tones ; pitch and quality.

Nature and propagation of light, simple experiments illustrating the reflection and retraction of light ; the prism, the dispersion of light, color.

CHEMISTRY.

Oxygen : Preparation, properties ; oxidation, examples ; combustion; reduction ; dependence of organic world on oxygen. Water : decomposition by electricity, common impurities, tests. Hydrogen : preparation and properties. Ammonia : preparation, properties, economic uses. Carbon ; forms, occurrence, properties, and uses ; carbon dioxide, preparation by combustion in air, occurrence in the atmosphere, preparation from limestone, properties, comparison with air relation to plant and animal life, tests ; carbonic acid. Limestone ; forms, occurrence ; lime and its manufacture ; action of water on quick lime ; action of acids on limestone ; other carbonates ; mortar ; building stone, animal shells, uses of limestones and its products. Air ; separation of oxygen from nitrogen ; properties of the latter. Acids, basis, salts, distinguishing characteristics.

APPENDIX C.

I. GEOMETRY.—*Lower and Middle Schools.*

Following are the details of the course in Euclid prescribed for the Lower and Middle Schools of the High Schools. The first thirteen of the constructions and the first nineteen of the theorems are prescribed for candidates for District teachers' non-professional certificates, in addition to the Practical Geometry of the Lower School.

A.—CONSTRUCTIONS.

To construct a triangle with sides of given lengths.

To construct an angle equal to a given rectilineal angle.

To bisect a given angle.

To bisect a given straight line.

To draw a line perpendicular to a given line from a given point in it.

To draw a line perpendicular to a given line from a given point not in the line.

Locus of a point equidistant from two given lines.

Locus of a point equidistant from two given points.

To draw a line parallel to another, through a given point.

To divide a given line into any number of equal parts.

To describe a parallelogram equal to a given triangle, and having an angle equal to a given angle.

To describe a parallelogram equal to a given rectilineal figure, and having an angle equal to a given angle.

On a given straight line to describe a parallelogram equal to a given triangle, and having an angle equal to a given angle.

To find the centre of a given circle.

From a given point to draw a tangent to a given circle.

On a given straight line to construct a segment of a circle containing an angle equal to a given angle.

From a given circle to cut off a segment containing an angle equal to a given angle.

In a circle to inscribe a triangle equiangular to a given triangle.

To find locus of centres of circles touching two given lines.

To inscribe a circle in a given triangle.

To describe a circle touching three given straight lines.

To describe a circle about a given triangle.

About a given circle to describe a triangle equiangular to a given triangle.

To divide a given line similarly to another given divided line.

To find the fourth proportional to three given lines.

To describe a polygon similar to a given polygon, and with the corresponding sides in a given ratio.

To find the mean proportional between two given straight lines.

To construct a polygon similar to a given polygon, and such that their areas are in a given ratio.

To describe a polygon of given shape and size.

B.—THEOREMS.

The sum of the angles of any triangle is equal to two right angles.

The angles at the base of an isosceles triangle are equal, with converse.

If the three sides of one triangle be equal, respectively, to the three sides of another, the triangles are equal in all respects.

If two sides and the included angle of one triangle be equal to two sides and the included angle of another triangle, the triangles are equal in all respects.

If two angles and one side of triangle be equal to two angles and the corresponding side of another, the triangles are equal in all respects.

If two sides and an angle opposite one of these sides be equal, respectively, in two triangles, the angles opposite the other pair of equal sides are either equal or supplemental.

The sum of the exterior angles of a polygon is four right angles.

The greater side of any triangle has the greater angle opposite it.

The greater angle of any triangle has the greater side opposite it.

If two sides of one triangle be equal respectively to two sides of another, that with the greater contained angle has the greater base, with converse.

If a transversal fall on two parallel lines, relations between angles formed, with converse.

Lines which join equal and parallel lines towards the same parts are themselves equal and parallel.

The opposite sides and angles of a parallelogram are equal and the diagonal bisects it.

Parallelograms on the same base, or on equal bases, and between the same parallels, are equal.

Triangles on the same base, or on equal bases, and between the same parallels, are equal.

Triangles equal in area, and on the same base, are between the same parallels.

If a parallelogram and a triangle be on the same base, and between the same parallels, the parallelogram is double the triangle.

Expressions for area of a parallelogram, and area of a triangle.

The compliments of the parallelograms about the diagonal of any parallelogram are equal.

The square on the hypotenuse of a right-angled triangle is equal to the sum of the squares on the sides.

If a straight line be divided into any two parts, the sum of the squares on the parts, together with twice the rectangle contained by the parts, is equal to the square on the whole line.

The square on a side of any triangle is equal to the sum of the squares on the two other sides — twice the rectangle contained by either of these sides and the projection of the other side on it.

If more than two equal straight lines can be drawn from the circumference of a circle to a point within it, that point is the centre.

The diameter is the greatest chord in a circle, and a chord nearer the centre is greater than one more remote. Also the greater chord is nearer the centre than the less.

The angle at the centre of a circle is double the angle at the circumference on the same arc.

The angles in the same segment of a circle are equal, with converse.

The opposite angles of a quadrilateral inscribed in a circle are together equal to two right angles, with converse.

The angle in a semicircle is a right angle; in a segment greater than a semicircle less than a right angle; in a segment less than a semicircle greater than a right angle.

A tangent is perpendicular to the radius to the point of contact; only one tangent can be drawn at a given point, the perpendicular to the tangent at the point of contact passes through the centre; the perpendicular from centre on tangent passes through the point of contact.

If two circles touch, the line joining the centres passes through the point of contact.

The angles which a chord drawn from the point of contact makes with the tangent, are equal to the angles in the alternate segments.

The rectangles under the segments of intersecting chords are equal.

If $OA \cdot OB = OC^2$, OC is a tangent to the circle through A , B and C .

Triangles of the altitude are as their bases.

A line parallel to the base of a triangle divides the sides proportionally, with the converse.

If the vertex angle of a triangle be bisected, the bisector divides the base into segments that are as the sides, with converse.

The analogous proposition when the exterior angle at the vertex is bisected, with converse.

If two triangles are equiangular, the sides are proportional.

If the sides of two triangles are proportional, the triangles are equiangular.

If the sides of two triangles about equal angles are proportional, the triangles are equiangular.

If two triangles have an angle in each equal, and the sides about two other triangles proportional, the remaining angles are equal or supplemental.

Similar triangles are as the squares on corresponding sides.

The perpendicular from a right angle of a right-angled triangle on the hypotenuse divides the triangle into two which are similar to the original triangle.

In equal circles, angles, whether at the centres or circumferences, are proportional to the arcs on which they stand.

The areas of two similar polygons are as the squares on corresponding sides.

If three lines be proportional, the first is to the third as the figure on the first to the similar figure on the second.

Questions and easy deductions on the preceding constructions and theorems.

NOTE.—In the formal deductive Geometry modifications of Euclid's treatment of the subject will be allowed, though not required, as follows:—

The employment of the "hypothetical construction."

The free employment of the method of superposition, including the rotation of figures about an axis, or about a point in a plane.

A modification of Euclid's parallel postulate.

A treatment of ratio and proportion restricted to the case in which the compared magnitudes are commensurable.

II. GEOMETRY—*Upper School.*

Following are the details of the course in Geometry prescribed for the Upper School of the High Schools:

A.

Exercises on the course prescribed for the Middle School, with special reference to the following topics—Loci; Maxima and Minima; The System of Inscribed, Escribed and Circumscribed Circles of a Triangle with metrical relations; Radical Axis.

B.—SYNTHETIC GEOMETRY.

The following additional propositions in Synthetic Geometry, with exercises thereon:—

To divide a given straight line internally and externally in medial section.

To describe a square that shall be equal to a given rectilinear figure.

To describe an isosceles triangle having each of the angles at the base double of the third angle.

To inscribe a regular pentagon in a given circle.

The squares on two sides of a triangle are together equal to twice the square on half the third side and twice the square on the median to that side.

If $A B C$ be a triangle, and A be joined to a point P of the base such that $B P : P C = m : n$, then $n A B^2 + m A C^2 = (m + n) A P^2 + n B P^2 + m P C^2$.

In a right-angled triangle the rectilinear figure described on the hypotenuse is equal to the sum of the similar and similarly described figures on the two other sides.

If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the rectangle contained by the sides of the triangle is equal

to the rectangle contained by the segments of the base, together with the square on the straight line which bisects the angle.

If from the vertical angle of a triangle a straight line be drawn perpendicular to the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.

The rectangle contained by the diagonals of a quadrilateral inscribed in a circle is equal to the sum of the two rectangles contained by its opposite sides.

Two similar polygons may be so placed that the lines joining corresponding points are concurrent.

If a straight line meet the sides BC , CA , AB , of a triangle ABC in D , E , F respectively, then $BD \cdot CE \cdot AF = DC \cdot EA \cdot FB$, and conversely. (Menelaus' Theorem.)

If straight lines through the angular points A , B , C of a triangle are concurrent, and intersect the opposite sides in D , E , F respectively, then $BD \cdot CE \cdot AF = DC \cdot EA \cdot FB$, and conversely. (Ceva's Theorem.)

If a point A lie on the polar of a point B with respect to a circle, then B lies on polar of A .

Any straight lines which passes through a fixed point is cut harmonically by the point, any circle, and the polar of the point with respect to the circle.

In a complete quadrilateral each diagonal is divided harmonically by the other two diagonals, and the angular points through which it passes.

C.—ELEMENTARY ANALYTICAL GEOMETRY.

Axes of co-ordinates. Position of a point in plane of reference.

Transformation of co-ordinates,—origin changed, or axes (rectangular) turned through a given angle.

$$+2A = x_1(y_2 - y_3) + \dots + \dots$$

Co-ordinates of point dividing line joining $P_1(x_1, y_1)$ and $P_2(x_2, y_2)$ in ratio $m:n$ are

$$x = \frac{mx_2 + nx_1}{m+n}, y = \frac{my_2 + ny_1}{m+n}.$$

$$(P_1 P_2)^2 = (x_1 - x_2)^2 + (y_1 - y_2)^2$$

Equations of straight lines.

$$\left. \begin{aligned} \frac{x - x_1}{x_1 - x_2} &= \frac{y - y_1}{y_1 - y_2} \\ \frac{x}{a} + \frac{y}{b} &= 1 \end{aligned} \right\} \text{Line defined by two points} \\ \text{through which it passes.}$$

$$\left. \begin{aligned} \frac{x - a}{\cos \theta} &= \frac{y - b}{\sin \theta} = r. \\ y &= mx + b. \\ y &= m(x - a). \end{aligned} \right\} \text{Line defined by one point} \\ \text{through which it passes,} \\ \text{and by its direction.}$$

$$x \cos a + y \sin a = p.$$

General equation of 1st degree, $Ax + By + C = 0$, represents a straight line.

Any line through (x_1, y_1) is

$$A(x - x_1) + B(y - y_1) = 0.$$

If θ be angle between $Ax + By + C = 0$ and $A'x + B'y + C' = 0$, then

$$\cos \theta = \frac{A A' + B B'}{\sqrt{A^2 + B^2} \sqrt{A'^2 + B'^2}}$$

Condition of \perp rity, $A A' + B B' = 0$.

Condition of \parallel ism, $\frac{A}{A'} = \frac{B}{B'}$.

Distance from (a, b) to $Ax + By + C = 0$, in direction whose direction cosines are (l, m) is

$$\frac{Aa + Bb + C}{A l + B m}$$

\perp r distance from (a, b) on $Ax + By + C = 0$

$$\frac{Aa + Bb + C}{\sqrt{A^2 + B^2}}$$

THE CIRCLE—

Equations in forms:

$$\begin{aligned} x^2 + y^2 &= r^2. \\ (x - a)^2 + (y - b)^2 &= r^2. \\ y^2 &= 2rx - x^2. \end{aligned}$$

General equation $x^2 + y^2 + 2Ax + 2By + C = 0$,

$$\text{or } (x + A)^2 + (y + B)^2 = A^2 + B^2 - C,$$

represents a circle with centre $(-A, -B)$ and radius.

$$\sqrt{A^2 + B^2 - C}$$

Tangent at (x', y') to $x^2 + y^2 = r^2$, is $xx' + yy' = r^2$.

Normal is $\frac{x}{x'} = \frac{y}{y'}$.

Tangent in form.

$$y = mx \pm r \sqrt{1 + m^2}.$$

Pole being (x', y') , polar is $xx' + yy' = r^2$.

If pole move along a line, polar turns about pole of that line

Length of tangent from

$$\begin{aligned} (x', y') \text{ to } x^2 + y^2 + 2Ax + 2By + C &= 0 \\ \text{is } x'^2 + y'^2 + 2Ax' + 2By' + C. \end{aligned}$$

Radical axis of

$$\begin{aligned} x^2 + y^2 + 2Ax + 2By + C &= 0 \\ x^2 + y^2 + 2A'x + 2B'y + C' &= 0 \end{aligned}$$

Easy exercises on the preceding propositions.

APPENDIX D.

Following are the details of the courses in Mediæval and Modern History prescribed for the Upper School of the High Schools:

MEDIAEVAL HISTORY.

1. The Triumph of Christianity over Paganism.
2. The Weakness of the Roman Empire; the Teutonic invasions; the fall of the Western division of the Empire.
3. The Revival of the Roman Empire in the Age of Justinian.
4. The Rise of Islam; the extent and permanence of its conquests.
5. The New Teutonic States in Europe; the Franks in Gaul; the English in Britain.
6. The Teutonic Power as seen in the Holy Roman Empire founded by Charlemagne.
7. The coming of the Northmen; the Danes in England; the Normans in France; the Norman conquest of England.
8. Phases of Mediæval Life: (1) the Papacy; (2) Monasticism; the Friars. (3) Feudalism; (4) Chivalry; (5) the Crusading movement.
9. The struggle between the Papacy and the Empire; its results.
10. The beginning of National Life in Europe as seen in a sketch of the History of (1) France and (2) England.
11. The Social Life of the Middle Ages: (1) the Condition of the People; (2) Life in the Towns; (3) Education; the rise of the Universities.
12. The end of the Mediæval Period: (1) the Revival of Learning; (2) the Menace from the Ottoman Power: the Fall of Constantinople; (3) the Beginnings of Discovery—America, the Sea-route to Asia, etc.

MODERN HISTORY.

1. Social, political and religious life in Italy at the opening of the sixteenth century; the Renaissance as seen at Florence.
2. The Protestant Revolt: (1) in Germany under Luther; (2) in Switzerland under Zwingli and Calvin; (3) in England and Scotland.
3. The Counter Reformation and its results: (1) the Jesuit Order and its founder, Ignatius Loyola; (2) the religious wars in France; (3) Philip II. and the Revolt in the Netherlands; (4) the Thirty Years' War.
4. The Consolidation of France under Richelieu and her ascendancy under Louis XIV.
5. The Rise of Russia; the work of Peter the Great and of Catharine II.
6. The Rise of Prussia; the work of Frederick the Great.
7. The French Revolution.
8. The Napoleonic Era.
9. The Great Powers since the Fall of Napoleon: (1) Political changes in France; (2) the Unification of Italy; (3) the Unification of Germany; (4) the Austria-Hungarian Monarchy; (5) Russia; (6) the United States.

APPENDIX E.—INTERIM COURSES OF STUDY.

I.—GEOMETRY FOR DISTRICT AND JUNIOR STANDING, 1904-1905.

For District teachers' non-professional certificates, the course in geometry for the examination of 1905 will be Euclid, Book I., easy deductions.

Until June 30th, 1906, the course in Geometry for the Middle School (Junior Standing) will be: Euclid, Books I., II., and III.; easy deductions.

II.—GEOMETRY, HISTORY, AND SCIENCE FOR SENIOR STANDING, 1904-1906.

Until June 30th, 1906, the Geometry, History, Physics, and Biology of the Upper School (Senior Standing) will be as follows:

I.—GEOMETRY.

Euclid, Books I., II., III., IV., and VI.; definitions of Book V.; deductions.

II.—HISTORY.

English History from the discovery of America till 1763. General outlines of Greek History till the fall of Corinth. General outlines of Roman History till the death of Augustus. The geography relating to the history prescribed.

III.—PHYSICS.

Mechanics: Measurement of velocity; uniformly accelerated rectilinear motion; metric units of force, work energy and power; equilibrium of forces acting at a point; triangle, parallelogram, and polygon of forces; parallel forces; principle of moments; centre of gravity; laws of friction; numerical examples.

Hydrostatics: Fluid pressure at a point; pressure on a horizontal plane; pressure on an inclined plane; resultant vertical pressure, and resultant horizontal pressure, when fluid is under air pressure and when not; transmission of pressure; Bramah's press; equilibrium of liquids of unequal density in a bent tube; the barometer; air-pump; water-pump, common and force; siphon.

Electricity: Voltaic cells, common kinds; chemical action in the cell; magnetic effects of the current; chemical effects of the current; voltmeters, electroplating; astatic and tangent galvanometers; simple notions of potential; Ohm's law; shunts; measurement of resistance; electric light, arc and incandescent; current induction; induction coil; dynamo and motor; the joule and watt; electric bell; telegraph; telephone; elements of terrestrial magnetism.

IV.—BIOLOGY.

1. *Elements of Zoology*: Thorough examination of the external form, the gills, and the viscera of some common fish. Study of the prepared skeleton of the same. Demonstration of the arrangement of the muscular and nervous systems and the sense-organs, as far as these can be studied without the aid of the microscope.

Comparison of the structure of the frog with that of the fish. The skeleton of the pectoral and pelvic girdles and of the appendages of the frog should be studied, and the chief facts in the development of its spawn till the adult form is attained should be observed.

Examination of the external form of a turtle and a snake.

Examination of the structure of a bird.

Study of the skeleton, and also of the teeth of a cat or dog.

Study of the crayfish as a type of the Arthropods.

Comparison of the crayfish with an insect (grasshopper, cricket, or cockroach); also with a millipede and a spider.

Examination of an earthworm.

Study of a fresh-water mussel.

The principles of zoological nomenclature as illustrated by some of the common fresh water fish, such as the sucker and herring, bass and perch.

Study of an amœba or paramœcium, as a type of a unicellular animal.

The modifications of the form of the body in vertebrates in connection with different methods of locomotion. The natural habits of the various animals examined.

2. *Elements of Botany*: The practical study of representatives of the flowering plants of the locality in which the preparatory school is situated, and representatives of the chief subdivisions of cryptogams, such as a fern, a lycopod, a horsetail, a livewort, a moss, a lichen, a mushroom, and a chara.

An elementary knowledge of the microscopic structure of the bean and the maize. Attention to drawing and description of parts of plants and to their classification. Comparison of different organs; morphology of root, stem, leaves and hair, parts of the flower; reproduction of flowering plants. pollination, fertilization, and the nature of fruit and seeds.

NOTE.—At the examinations of 1905 and 1906 the candidate for Senior standing must submit to the Public School Inspector with his application a certificate from the principal of the school he attended in preparation for the examination, or other credible testimony, that he has taken up practically the Physics, Chemistry, and Biology of the Upper School. There will be no practical examinations in Science at the Department examinations.

PROVINCIAL EXAMINATIONS IN DRAWING, PAINTING, ETC.

1.—REGULATIONS.

Approved January, 1904.

1. The Education Department shall conduct an examination in April of each year for pupils attending art schools and evening classes. With the consent of the Education Department, pupils attending other schools may write at the same examination. The local expenses of the examination shall be paid by the school or class concerned.

2. Each Presiding Officer shall be responsible for the safe keeping of the parcel containing the examination papers, and for keeping the same unopened, until the time of the examination; he shall preside at and be responsible for the proper conduct of the examination. Places shall be allotted to the candidates sufficiently far apart that they cannot overlook each other. He shall allot to each candidate the number given him for each course on the list.

3. Punctually at the time of the commencement of the examination in each subject the Presiding Officer, in the presence of the candidates, shall break the seal of the parcel containing the examination papers. The papers of one subject only shall be opened at one time, commencing with number 1 on the time-table, and following consecutively, unless instructions are given to conduct two or more examinations at the same time.

4. The presiding Officer may permit the teacher of the class to assist in setting up objects for model drawing, drawing from the "round," etc. But he must leave the room before the examination papers are opened. Should any teacher wish to be examined, the Presiding Officer will place him apart from the other candidates during the examination.

5. Should any candidate be detected in copying from another, or allowing another to copy from him, or in taking into the room any book, notes, or

anything from which he might derive assistance in the examination, or in talking or whispering, it shall be the duty of the Presiding Officer; if he obtains clear evidence of the fact at the time of its occurrence, to cause such candidate at once to leave the room; neither shall such candidate be permitted to return during the remaining part of the examination, and his name shall be struck off the list. If, however, the evidence be not clear at the time, or be obtained after the conclusion of the examination, the Presiding Officer shall report the case to the Minister of Education.

6. No candidate leaving the room after issue of the examination papers, in any subject, shall be permitted to return during the examination of the subject in hand. Candidates who have been admitted late must hand in their papers at the same time as others.

7. Punctually at the expiration of the time allowed, the Presiding Officer shall direct the candidates to stop drawing or writing, and cause them to hand in their papers immediately; and shall check off each paper so as to be certain that the number on the paper agrees with the number of the candidate. In no case shall the Presiding Officer allow the teacher or any other person to examine the work of the students, neither shall he make any comments or remarks about the character of the work done.

8. The Presiding Officer shall secure in a sealed parcel or envelope the work of the candidates and all unused papers and drawings, and at the close of the examination, and on the same day, shall forward the same by post or express, prepaid, to the Education Department.

II.—DIRECTIONS FOR PRESIDING OFFICER.

1. When *distributing the papers*, allot to each candidate the number given him for each course on the accompanying lists; as the candidates names and numbers are entered in the Department Registers; no names on the list must be erased, or others substituted for them. If extra candidates present themselves for examination enter their names on the lists and allot them the last number on the list, with a letter of the alphabet added, thus 486, 486a, 486b, etc.

2. When *collecting the papers*, check the numbers on the papers and see that they correspond with each candidate's number on the lists. *All copies, drawings and papers must be returned to the Department of Education*

Primary Art Course.

1. *Freehand Drawing from Flat Examples.*—An example to be copied is sent for each candidate. Notify the candidates that ruling, tracing or measuring, or other mechanical means of execution, are strictly forbidden in working this exercise. It must be pure outline; no shading allowed.

2. *Practical Geometry.*—Instruments must be used and all construction lines allowed to remain.

3. *Linear Perspective.*—Instruments must be used and all working lines allowed to remain.

4. *Model Drawing.*—Provide a sufficient number of the objects selected by the Department, and place them in such a position that all the candidates may have a full view of them. No measuring or use of instruments is allowed; but the pencil may be held between the eye and the object for the purpose of estimating its apparent size. This exercise must be pure outline, no shading allowed; the purpose being to combine correctness of drawing and neatness of execution.

5. *Memory or Blackboard Drawing.* No instruments or measuring allowed. Either crayon or pencil may be used.

Advanced Art Course.

1. *Shading from Flat Examples.*—Sufficient copies are sent for groups of two students to one drawing. No ruling or measuring allowed. No restriction as to style of shading—either point or stump may be used.

2. *Outline Drawing from the "round."*—This drawing must be life size, from an antique or modern bust. No ruling or measuring allowed. If there be any shading the exercise will not be examined.

3. *Shading from the "round."*—Provide a sufficient number of the objects selected by the Department; when possible they should be placed in the centre of the room; if at night underneath the light, and students arranged at a uniform distance around them. No restriction as to style of shading.

4. *Drawing from Flowers, etc.*—Select plants in bloom such as Chinese Primroses or small Geraniums, having a sufficient number of examples so that there be not more than three or four candidates copying the same plant. This must be strict outline; no shading allowed. Distance, 6 to 8 feet.

5. *Industrial Design.*—Instruments to be used—units of design may be repeated mechanically by means of tracing paper. Drawings of flowers or ornaments are supplied on which to base designs—not as copies. The designs may be in pencil, ink, or tinted, at the option of the student.

Mechanical Drawing Course.

1. *Projection and Descriptive Geometry.*—Instruments to be used.

2. *Machine Drawing.*—Instruments to be used.

3. *Building Construction.*—Instruments to be used.

4. *Architectural Design.*—Sessional work only is required.

5. *Advanced Perspective.*—Instruments to be used.

Industrial Art Course.

1. *Modelling in Clay.*—Send specimens of work done during the session certified by the teacher as having been executed entirely by the student.

2. *Wood-carving.*—Send specimens of work done during the current academic year certified by the teacher, as having been executed *entirely* by the student.

3. *Wood-engraving.*—Send specimens of work done during the current academic year certified by the teacher, as having been executed *entirely* by the student.

4. *Lithography.*—Send specimens of work done during the current academic year certified by the teacher, as having been executed *entirely* by the student.

5. *China Painting.*—Send specimens of work done during the current academic year certified by the teacher, as having been executed *entirely* by the student.

Extra Subjects.

Specimens of paintings, wood carving, etc., sent for examination for certificates must be numbered and sent to the Department prepaid.

SUMMER SCHOOLS FOR TEACHERS, 1904.

The Education Department has made arrangements for Summer Schools, to be held at Chatham, Cobourg and Kingston. The main purpose of the Schools is to give instruction in the following Departments :—

MANUAL TRAINING.

HOUSEHOLD SCIENCE.

NATURE STUDY.

DRAWING.

Classes will be organized so as to enable students to take as many as convenient of these departments. Lectures will be given by Specialists in the respective subjects. Any further information required will be obtained by students after the classes are organized. No fees will be required, and it may be presumed that the cost of books, etc., will be slight. The Schools will be organized at 2 p.m., Monday, July 4th, when all necessary information will be given. The session will continue for three weeks. Certificates of attendance will be awarded to those students who show satisfactory proficiency.

Persons who desire to avail themselves of the privileges offered, should make application at an early date to the Principal of the Summer School they purpose attending. No special form of application will be needed.

TORONTO, April, 1904.

APPORTIONMENT OF THE LEGISLATIVE PUBLIC SCHOOL GRANT FOR 1904.

The apportionment of the Grant to the several municipalities is based upon the latest Returns of the Population for the year 1903, and the division between the Public and Separate Schools on the average attendance of that year, as reported by the Inspectors, Public School Boards, and Separate School Trustees respectively.

While the Separate Schools will receive their portion of the Grant direct from the Department, that of the Public Schools will be paid, according to this Schedule, through the respective County, City, Town, and Village Treasurers.

Under the provisions of Section 5 of "An Act respecting the Education Department, 1901," the Education Department is empowered to appropriate out of moneys voted by the Legislature for public and separate schools a sum not exceeding \$5.00 for every school in which the Regulations of the Department as to equipment, ventilation, heating, lighting and the care of the premises generally have been complied with."

Each County Inspector is therefore authorized to deduct from the apportionment of each township such an amount as will provide the sum of \$5.00 to be paid on his order to each Trustee Board that has complied with the requirements mentioned.

TORONTO, May, 1904.

PUBLIC SCHOOL APPORTIONMENT TO COUNTIES FOR 1904.

1. COUNTY OF BRANT.

Municipalities.	Apportionment.
Brantford	\$584 00
Burford	494 00
Dumfries, South	284 00
Oakland	83 00
Onondaga	126 00
Total	\$1,571 00

2. COUNTY OF BRUCE.

Albemarle	\$166 00
Amabel	319 00
Arran	273 00
Brant	463 00
Bruce	331 00
Carriick	290 00
Culross	216 00
Eastnor	204 00
Elderslie	258 00
Greenock	253 00
Huron	379 00
Kincardine	329 00
Kinloss	267 00
Lindsay and St. Edmunds	93 00
Saugeen	173 00
Total	\$4,013 00

3. COUNTY OF CARLETON.

Fitzroy	\$291 00
Gloucester	503 00
Goulbourn	288 00
Gower, North	224 00
Huntley	256 00
March	87 00
Marlborough	177 00
Nepean	482 00
Osgoode	507 00
Torbolton	110 00
Total	\$2,927 00

4. COUNTY OF DUFFERIN.

Amaranth	\$296 00
Garafraxa, East	273 00
Luther, East	204 00
Melancthon	412 00
Mono	339 00
Mulmur	330 00
Total	\$1,853 00

5. COUNTY OF ELGIN.

Aldbrough	\$537 00
Bayham	429 00
Dorchester, South	153 00
Dunwich	379 00
Malahide	423 00
Southwold	426 00
Yarmouth	548 00
Total	\$2,895 00

6. COUNTY OF ESSEX.

Anderdon	\$184 00
Colchester, North	220 00
Colchester, South	330 00
Gosfield, North	243 00
Gosfield, South	278 00
Maldstone	242 00
Mersea	492 00
Malden	110 00
Pelee Island	75 00
Rochester	61 00
Sandwich, East	71 00
Sandwich, West	215 00
Sandwich, South	137 00
Tilbury, North	42 00
Tilbury, West	241 00
Total	\$2,941 00

7. COUNTY OF FRONTENAC.

Municipalities.	Apportionment.
Barrie	\$ 63 00
Bedford	167 00
Clarendon and Miller	96 00
Hinchinbrooke	154 00
Howe Island	
Kennebec	139 00
Kingston	294 00
Loughborough	185 00
Olden	125 00
Oso	131 00
Palmerston and N. and S. Canoto	126 00
Pittsburg	266 00
Portland	239 00
Storrington	204 00
Wolfe Island	99 00
Total	\$1,299 00

8. COUNTY OF GREY.

Artemesia	\$392 00
Bentlnok	379 00
Collingwood	413 00
Derby	216 00
Egremont	367 00
Euphrasia	385 00
Glenelg	282 00
Holland	360 00
Keppel	421 00
Normanby	493 00
Csprey	372 00
Proton	352 00
Sarawak	165 00
St. Vincent	355 00
Sullivan	393 00
Sydenham	418 00
Total	\$5,700 00

9. COUNTY OF HALDIMAND.

Canborough	\$107 00
Cayuga, North	182 00
Cayuga, South	90 00
Dunn	96 00
Moulton	238 00
Onelda	166 00
Rainham	211 00
Seneca	207 00
Sherbrooke	44 00
W. Ipole	457 00
Total	\$1,780 00

10. COUNTY OF HALIBURTON.

Anson and Hindon	\$32 00
Cardiff	71 00
Dudley, Dysart, Harcourt, Harburn, Gullford	120 00
Glamorgan	5 00
Livingstone	55 00
Lutterworth	6 00
McClintock	147 00
Mommouth	63 00
Nightingale	1 00
Sherbourne	17 00
Snowdon	96 00
Stanhope	52 00
Total	\$728 00

11. COUNTY OF HALTON.

Esqueving	\$414 00
Nassagaweya	276 00
Nelson	314 00
Trafalgar	402 00
Total	\$1,406 00

12. COUNTY OF HASTINGS.

Municipalities.	Apportionment.
Carlow	\$82 00
Dungannon	92 00
Elzevir and Grimsthorpe	156 00
Faraday	130 00
Hungerford	434 00
Huntingdon	264 00
McClure, Wicklow and Bangor	111 00
Herschel and Monteagle	233 00
Madoc	399 00
Marmora and Lake	178 00
Mayo	64 00
Rawdon	389 00
Sidney	422 00
Thurlow	422 00
Tudor and Cashel	169 00
Limerick	62 00
Wollaston	92 00
Tyendinaga	310 00
Total	\$3,949 00

13. COUNTY OF HURON.

Ashfield	\$331 00
Colborne	211 00
Goderich	279 00
Grey	388 00
Hay	371 00
Howick	459 00
Hullett	311 00
McKillop	249 00
Morris	303 00
Stanley	244 00
Stephen	462 00
Tuckersmith	285 00
Turnberry	247 00
Usborne	266 00
Wawanosh, East	225 00
Wawanosh, West	229 00
Total	\$4,850 00

14. COUNTY OF KENT.

Camden	\$294 00
Chatham	608 00
Dover	375 00
Harwich	545 00
Howard	405 00
Orford	318 00
Raleigh	490 00
Romney	217 00
Tilbury, East	388 00
Zone	148 00
Total	\$3,788 00

15. COUNTY OF LAMBTON.

Bosanquet	\$309 00
Brooke	411 00
Dawn	408 00

COUNTY OF LAMBTON.—Con.

Municipalities.	Apportionment.
Enniskillen	\$565 00
Euphemia	259 00
Moore	524 00
Plympton	408 00
Sarnia	250 00
Sombra	449 00
Warwick	374 00
Total	\$3,957 00

16. COUNTY OF LANARK.

Bathurst	\$278 00
Beckwith	189 00
Burgess, North	46 00
Dalhousie and Sherbrooke, North	204 00
Darling	87 00
Drummond	224 00
Elmaley, North	120 00
Lanark	209 00
Lavant	63 00
Montague	230 00
Packenhams	238 00
Ramsay	247 00
Sherbrooke, South	96 00
Total	\$2,231 00

17. COUNTY OF LEEDS.

Bastard and Burgess, South	\$328 00
Crosby, North	136 00
Crosby, South	192 00
Elizabethtown	463 00
Elmsley, South	87 00
Kitley	228 00
Leeds and Lansdowne, Front	328 00
Leeds and Lansdowne, Rear	268 00
Yonge and Escott, Rear	128 00
Yonge, Front and Escott	292 00
Total	\$2,450 00

17 (a) COUNTY OF GRENVILLE.

Augusta	\$436 00
Edwardsburg	410 00
Gower, South	90 00
Oxford, Rideau	310 00
Wolford	206 00
Total	\$1,452 00

18. COUNTY OF LENNOX AND ADDINGTON.

Adolphustown	\$64 00
Amherst Island	96 00
Anglesea, Effingham and Kaladar	157 00
Camden, East	563 00
Denbigh, Abinger and Ashley	127 00
Ernestown	325 00

COUNTY OF LENNOX AND ADDINGTON.—
Con.

Municipalities.	Apportionment.
Fredericksburg, North	\$173 00
Fredericksburg, South	109 00
Richmond	266 00
Sheffield	208 00
Total	\$2,088 00

19. COUNTY OF LINCOLN.

Caistor	\$195 00
Clinton	220 00
Gainsborough	168 00
Grantham	226 00
Grimsby, North	142 00
Grimsby, South	157 00
Louth	175 00
Niagara	204 00
Total	\$1,487 00

20. COUNTY OF MIDDLESEX.

Adelaide	\$226 00
Biddulph	190 00
Caradoc	425 00
Delaware	177 00
Dorchester, North	398 00
Ekfrid	308 00
Lobo	308 00
London	920 00
McGillivray	322 00
Metcalfe	180 00
Mosa	291 00
Nissouri, West	313 00
Westminster	527 00
Williams, East	157 00
Williams, West	162 00
Total	\$4,904 00

21. COUNTY OF NORFOLK.

Charlotteville	\$377 00
Houghton	237 00
Middleton	289 00
Townsend	455 00
Walsingham, North	223 00
Walsingham, South	204 00
Windham	397 00
Woodhouse	262 00
Total	\$2,444 00

22. COUNTY OF NORTHUMBER-
LAND.

Alnwick	\$122 00
Brighton	296 00
Cramahc	275 00
Haldimand	393 00

COUNTY OF NORTHUMBERLAND.—
Con.

Municipalities.	Apportionment.
Hamilton	440 00
Monaghan, South	106 00
Murray	315 00
Percy	318 00
Seymour	346 00
Total	\$2,611 00

22. (a) COUNTY OF DURHAM.

Cartwright	\$208 00
Cavan	295 00
Clarke	397 00
Darlington	459 00
Hope	382 00
Manvers	341 00
Total	\$2,082 00

23. COUNTY OF ONTARIO.

Brook	\$436 00
Mara	296 00
Pickering	632 00
Rama	150 00
Reach	392 00
Scott	257 00
Scugog Island	57 00
Thorah	156 00
Uxbridge	327 00
Whitby, East	303 00
Whitby	250 00
Total	\$3,256 00

24. COUNTY OF OXFORD.

Blandford	\$192 00
Blenheim	505 00
Dereham	417 00
Nissouri, East	282 00
Norwich, North	259 00
Norwich, South	300 00
Oxford, North	149 00
Oxford, East	243 00
Oxford, West	244 00
Zorra, East	483 00
Zorra, West	254 00
Total	\$3,377 00

25. COUNTY OF PEEL.

Albion	\$255 00
Caledon	468 00
Chinguacousy	441 00
Gore of Toronto	96 00
Toronto	594 00
Total	\$1,855 00

26. COUNTY OF PERTH.

Municipalities.	Apportionment.
Blanchard	\$301 00
Downie	289 00
Easthope, North	259 00
Easthope, South	223 00
Ellice	323 00
Elma	453 00
Fullarton	259 00
Hibbert	181 00
Logan	336 00
Mornington	339 00
Wallace	327 00
Total	\$3,290 00

27. COUNTY OF PETERBOROUGH.

Anstruther	\$33 00
Asphodel	193 00
Belmont	218 00
Burleigh	41 00
Cavendish	16 00
Chandos	95 00
Douro	256 00
Dummer	215 00
Ennismore	93 00
Galway	110 00
Harvey	118 00
Methuen	29 00
Monaghan, North	107 00
Otonabee	380 00
Smith	321 00
Total	\$2,225 00

28. COUNTY OF PRESCOTT.

Alfred	\$31 00
Caledonia	108 00
Hawkesbury, East	273 00
Hawkesbury, West	320 00
Longueuil	56 00
Plantagenet, North	314 00
Plantagenet, South	204 00
Total	\$1,305 00

28 (a) COUNTY OF RUSSELL.

Cambridge	\$153 00
Clarence	126 00
Cumberland	322 00
Russell	134 00
Total	\$735 00

29. COUNTY OF PRINCE EDWARD

Ameliasburg	\$354 00
Athol	120 00
Hallowell	371 00
Hillier	169 00
Marysburg, North	131 00
Marysburg, South	160 00
Sophiasburg	212 00
Total	\$1,517 00

30. COUNTY OF RENFREW.

Municipalities.	Apportionment.
Admaston	\$252 00
Algona, South	115 00
Alice and Fraser	241 00
Bagot and Blithfield	181 00
Brougham	49 00
Bromley	136 00
Brudenell and Lynedoch	167 00
Grattan	222 00
Griffith and Matawatchan	56 00
Hagarty, Jones, Sherwood, Richards and Burns	201 00
Head, Clara and Maria	41 00
Horton	173 00
McNab	413 00
Pembroke	100 00
Petewawa	127 00
Radcliffe	38 00
Raglan	89 00
Rolph, Wylie, McKay, Buchanan	120 00
Ross	241 00
Sebastopol	77 00
Stafford	106 00
Westmeath	391 00
Wilberforce and Algona, North	293 00
Total	\$3,831 00

31. COUNTY OF SIMCOE.

Adjala	\$192 00
Essa	493 00
Floss	412 00
Gwillimbury, West	264 00
Innisfil	379 00
Matchedash	44 00
Medonte	464 00
Nottawasaga	606 00
Orillia	455 00
Oro	462 00
Sunnisdale	251 00
Tay	593 00
Tiny	397 00
Tecumseth	365 00
Tossorontio	166 00
Vespra	323 00
Total	\$5,866 00

32. COUNTY OF STORMONT.

Cornwall	\$616 00
Finch	387 00
Osnabrock	584 00
Roxborough	414 00
Total	\$2,001 00

32. (a) COUNTY OF DUNDAS.

Matilda	\$428 00
Mountain	348 00
Williamsburg	463 00
Winchester	397 00
Total	\$1,636 00

32 (b) COUNTY OF GLENGARRY.

Municipalities.	Apportionment.
Charlottenburg	\$538 00
Kenyon	417 00
Lancaster	408 00
Lochiel	390 00
Total	\$1,815 00

33. COUNTY OF VICTORIA.

Bexley	\$104 00
Carden	82 00
Dalton	61 00
Eldon	346 00
Emily	244 00
Fenelon	266 00
Laxton, Digby and Longford	89 00
Mariposa	404 00
Ops	274 00
Somerville	222 00
Vernulam	223 00
Total	\$2,375 00

34. COUNTY OF WATERLOO.

Dumfries, North	\$238 00
Waterloo	729 00
Wellesley	444 00
Wilmot	530 00
Woolwich	476 00
Total	\$2,415 00

35. COUNTY OF WELLAND.

Bertie	\$340 00
Crowland	115 00
Humberstone	311 00
Pelham	293 00
Stamford	207 00
Thorold	209 00
Wainfleet	299 00
Willoughby	107 00
Total	\$1,881 00

36. COUNTY OF WELLINGTON.

Arthur.....	\$263 00
Eramosa	317 00

COUNTY OF WELLINGTON.—Con.

Municipalities.	Apportionment.
Erin	402 30
Garafraxa, West	\$250 00
Guelph	268 00
Inther, West	244 00
Maryborough	352 00
Minto	349 00
Nichol	190 00
Peel	424 00
Pilkington	156 00
Puslinch	348 00
Total	\$3,573 00

37. COUNTY OF WENTWORTH.

Ancaster	\$433 00
Barton	448 00
Beverly	401 00
Binbrook	144 00
Flamborough, East	292 00
Flamborough, West	340 00
Glanford	176 00
Slatfleet	402 00
Total	\$2,696 00

38. COUNTY OF YORK.

Etobicoke	\$452 00
Georgina	198 00
Gwillimbury, East	401 00
Gwillimbury, North	189 00
King	583 00
Markham	667 00
Scarborough	427 00
Vaughan	507 00
Whitchurch	373 00
York	1,231 00
Total	\$4,927 00

39. DISTRICTS.

Algoma, Muskoka, Nipissing, Parry Sound, Rainy River, and Thunder Bay, including rural, public and separate schools, but not any town or village named on this list	\$40,000 00
--	-------------

Total \$40,000 00

APPORTIONMENT TO ROMAN CATHOLIC SEPARATE SCHOOLS FOR 1904.

School Sections.	Apportionment.
Adjala	10 \$26 00
Alfred	3 18 00
do	6 22 00
do 7 (with 8, Plantagenet, South)	9 00
do	7 33 00
do	8 46 00
do	9 25 00
do	10 78 00
do	11 18 00
do	12 25 00
do	13 30 00

School Sections	Apportionment.
Alfred	14 14 00
do	15 24 00
Admaston.....	4 17 00
Anderdon 2, 5 and 8 (with 6 and 9 Sandwich West)	30 00
do	3 and 4 19 00
Arthur.....	6 31 00
do	10 34 00
Ashfield.....	2 38 00
Asphodel.....	4 21 00
Angusta.....	15 11 00

APPORTIONMENT TO ROMAN CATHOLIC SEPARATE SCHOOLS FOR 1904.—Continued.

School Sections.	Apportionment.	
Balfour, 1, with 1 Rayside (District of Algoma)	3	11 00
Biddulph.....	4	33 00
do	6	22 00
(with 1 McGillivray)		11 00
Bonsfield, 1A, 1B, 2, 4 (District of Nipissing)		
Brant (with 3 Greenock) ..	2	9 00
Brighton.....	1 (15)	17 00
Bromley.....	4	15 00
do	6	25 00
do	7	46 00
Brougham.....	1	14 00
Burgess, North.....	2	21 00
do	4	14 00
do	6	10 00
Caledonia	3, 4 and 10	12 00
do 6 (with 7, Plantagenet S.) ..		15 00
do	10	17 00
do	12	33 00
do	13	15 00
Cambridge.....	3	25 00
do	4	19 00
do	5	32 00
do	6	20 00
do	6 and 7	43 00
do	14P	18 00
Carrick.....	1	30 00
do (with 1 Culross).....	1	64 00
do	2	19 00
do (with 2 Culross)	2	12 00
do	4	29 00
do	14	113 00
Charlottenburg.....	15	44 00
do	16	25 00
Chisholm and Boulter.....	1 (Nipissing)	
Chisholm.....	2 do	
Clarence.....	3	14 00
do	5	85 00
do	6	52 00
do	8	39 00
do	11	28 00
do	12	19 00
do	13	11 00
do	14	23 00
do	16	29 00
do	17	21 00
do	18	19 00
do	19	12 00
do	20	14 00
do	21	28 00
Cornwall	1	14 00
do	16	65 00
Crosby, North.....	4	67 00
do	7	4 00
Culross (with 1 Carrick).....	1	77 00
do (with 2 Carrick).....	2	14 00
Cumberland.....	10	5 00
do	11	18 00
do	13	16 00
do	14	32 00
Wilke, 6 (District of Algoma) ..		
Downie.....	9	33 00

School Sections.	Apportionment	
Dover.....	3	60 00
do	7	32 00
do	9	39 00
Dunnett and Rutter, 1 (District of Nipissing).....		
Edwardsburg.....	2	5 00
Ellice.....	1	4 00
do	6 to be app'd	
do	7	18 00
Ferris, 3 (District of Nipissing) ..		
do 4 do		
Finch.....	5	56 00
Flamborough, West.....	2	6 00
Gibbons, 1 (District of Nipissing) ..		
Greenock, 3 (with 2 Brant) ..		66 00
Glenelg.....	5	15 00
do	7	27 00
Gloucester, 1 (with 3 Osgoode) ..		9 00
do	4, 5 and 12	7 00
do	14	30 00
do	15	67 00
do	17	22 00
do	20	16 00
do	22	13 00
do	25	96 00
do	26	19 00
Griffith, etc.....	3	13 00
Hagarty.....	4	44 00
do	12	50 00
Haldimand	2	27 00
do	14	19 00
Harwich.....	9	26 00
Hawkesbury, East.....	2	58 00
do	4	15 00
do	6	14 00
do	7	101 00
do	10	54 00
do	11	30 00
do	12	14 00
do	15	24 00
do	16	11 00
Hay.....	1	41 00
do	11 to be app'd	
Hibbert (1).....	3	21 00
do 2 (with McKillop & Logan) ..		39 00
do 3 (with McKillop, etc.) ..		3 00
Howe Island	1	12 00
do	2	18 00
do	3	20 00
Holland, etc.....	3	18 00
Hullett.....	2	19 00
Keewatin, 1 (see District of Algoma) ..		
Kenyon.....	12	15 00
Kingston	8	18 00
Lancaster.....	14	43 00
Lochiel.....	11	22 00
do	12A	34 00
do	12B	51 00
Longueuil, West	2	21 00
do	4A	26 00
do	7	19 00
Loughboro'	2	11 00
do	10	12 00

APPORTIONMENT TO ROMAN CATHOLIC SEPARATE SCHOOLS FOR 1904.—Concluded.

School Sections.	Apportionments.	School sections.	Apportionment
Maldstone.....	1 48 00	Russell	7 21 00
do	2 23 00	do	8 28 00
do 4 (with 2 Rochester) ..	20 00	do	13 16 00
do 8 (with 5 Sandwich 8) ..	27 00	do	14 18 00
Malden.....	3A 33 00	Sandwich, East.....	1 110 00
do	3B 21 00	do	2 19 00
Mara.....	3 60 00	do	3 19 00
March.....	3 43 00	do	4 89 00
Marmora and Lake.....	1 14 00	do West.....	1 38 00
Matawatchan.....	3 27 00	do	4 23 00
Moore.....	3, 4 and 5 10 00	do 6 and 9 (with 2, 5, 8,	
Mornington.....	4 26 00	Anderdon.....	26 00
McGillivray, 1 (with 9 Biddulph) ..	9 00	Sandwich, South, 5 (with 8 Maldstone) ..	26 00
McKillop.....	1 21 00	do	7 26 00
do 3 (with Hibbert) ..	6 00	Seymour, 12 (with 12 Percy) ..	3 00
do (2 Hibbert, etc.) ..	11 00	Sheffield.....	6 28 00
Nepean.....	7 30 00	Sherwood.....	6 61 00
do	15 93 00	Sombra.....	5 16 00
Nichol.....	1 15 00	Stafford.....	2 25 00
Normanby.....	5 16 00	Stephen.....	6 33 00
do	10 16 00	Springer, 1 (District of Nipissing) ..	
Osgoode.....	1 15 00	do 2 do do ..	
do	2 (15) 9 00	do 3 do do ..	
do 3 (with 1 Gloucester) ..	11 00	Stanley.....	1 to be app'd
Papineau, 1 (see District of Nipissing)		Sydenham.....	7 8 00
do 2 do do ..		Tilbury, North.....	1 60 00
Papineau 2B do do ..		do	2 37 00
Peel.....	8 20 00	do	6 29 00
do	12 17 00	do	7 45 00
Percy.....	5 10 00	do 11 (with 10 Rochester) ..	22 00
do 12 (with 12 Seymour) ..	3 00	Tilbury, West.....	11 27 00
Plantagenet, North	4 16 00	do East (inc. arrears) ..	1 18 00
do	7 23 00	do	3 to be app'd
do	8 59 00	Tiny	2 94 00
do	9 33 00	Toronto Gore.....	6 13 00
do	12 9 00	Tyendinaga.....	18 13 00
Plantagenet, South.....	4 51 00	do	20 20 00
do 7 (with 6 Cale-		do	24 20 00
donia).....	7 39 00	do	28 13 00
do	13 00	do	30 17 00
Plantagenet, South	8 24 00	Vespra.....	7 4 00
do 8 (with 7 Alfred) ..	7 00	Waterloo.....	13 61 00
do	11 to be app'd	Wawanosh, West.....	1 19 00
Portland.....	11 16 00	Wellesley.....	5 17 00
Proton.....	6 15 00	do	9 & 10 24 00
Raleigh.....	4 8 00	do	11 73 00
do	5 24 00	do	12 3 00
do	6 20 00	Westminster.....	13 10 00
Rayside, 1 (with 1 Balfour) Algoma ..		Widdifield, 2 (District of Nipissing) ..	
Richmond.....	10 and 17 14 00	Williams, West.....	10 15 00
Rochester, 2 (with 4 Maldstone) ..	22 00	Wilmot.....	15 60 00
do	3 69 00	Winchester.....	12 (with Russell) 13 00
do	6 55 00	Windham.....	8 46 00
do	7 47 00	Wolfe Island.....	1 9 00
do	9 and 14 37 00	do	2 13 00
do 10 (with 11 Tilbury, N.) ..	10 00	do	4 30 00
Roxboro'.....	12 84 00	do	7 15 00
do	16 31 00	Woolwich	10 26 00
Russell, 1 (with 12 Winchester) ..	6 00	Yonge and Escott R.	4 11 00
do	4 18 00	York	1 33 00
do	6 101 00		

86,759 00

APPORTIONMENT TO CITIES, TOWNS AND VILLAGES FOR 1904.

CITIES	Public Schools.	Separate Schools.	Total.
	\$ c.	\$ c.	\$ c.
Belleville	921 00	286 00	1,207 00
Brantford	2,005 00	240 00	2,245 00
Chatham	920 00	199 00	1,119 00
Guelph	1,118 00	258 00	1,376 00
Hamilton	5,523 00	1,120 00	6,643 00
Kingston	1,754 00	459 00	2,213 00
London	4,211 00	654 00	4,865 00
Niagara Falls	784 00	122 00	896 00
Ottawa	3,497 00	3,975 00	7,472 00
St. Catharines	1,023 00	272 00	1,295 00
St. Thomas	1,267 00	185 00	1,452 00
Stratford	1,143 00	247 00	1,390 00
Toronto	22,803 00	3,762 00	26,565 00
Windsor	1,135 00	492 00	1,127 00
Woodstock	1,061 00	66 00	1,627 00
Total	\$49,165 00	\$12,327 00	\$61,492 00
TOWNS.			
Alexandria	65 00	185 00	250 00
Alliston	162 00		152 00
Almonte	270 00	85 00	355 00
Amherstburg	130 00	134 00	264 00
Arnprior	275 00	174 00	449 00
Aurora	201 00		201 00
Aylmer	265 00		265 00
Barrie	626 00	116 00	742 00
Berlin	978 00	291 00	1,269 00
Blenheim	187 00		187 00
Bothwell	104 00		104 00
Bowmanville	339 00		339 00
Bracebridge	323 00		323 00
Brampton	345 00		345 00
Brockville	836 00	256 00	1,092 00
Bruce Mines	87 00		87 00
Cache Bay	69 00		69 00
Carleton Place	503 00		503 00
Clinton	277 00	141 00	277 00
Cobourg	362 00		503 00
Collingwood	850 00		850 00
Copper Cliff	261 00	407 00	261 00
Cornwall	321 00		728 00
Deseronto	429 00		429 00
Dresden	193 00	91 00	193 00
Dundas	324 00		415 00
Dunnville	269 00		269 00
Durham	208 00		208 00
East Toronto	211 00		211 00
Essex	177 00		177 00
Forest	191 00	(in town gt.)	191 00
Fort Frances	94 00	171 00	94 00
Fort William	523 00	62 00	694 00
Galt	923 00		985 00
Gananoque	447 00	58 00	447 00
Goderich	429 00		487 00
Gore Bay	87 00		87 00
Gravenhurst	267 00		267 00
Harriston	219 00	226 00	219 00
Hawkesbury	32 00		258 00

APPORTIONMENT TO CITIES, TOWNS AND VILLAGES FOR 1904.—Continued.

TOWNS.—Continued.	Public Schools.	Separate Schools.	Total
	\$ c.	\$ c.	\$ c.
Heapelev	295 00		295 00
Huntsville	267 00	57 00	267 00
Ingersoll	499 00		556 00
Kincardine	291 00		291 00
Kingsville	202 00		202 00
Leamington	318 00		318 00
Lindsay	650 00	210 00	860 00
Listowel	327 00		327 00
Little Current	121 00		121 00
Mattawa	34 00	137 00	171 00
Meaford	243 00		243 00
Midland	459 00		459 00
Mitchell	226 00		226 00
Milton	140 00		140 00
Mount Forest	251 00		251 00
Napanee	348 00		348 00
New Liskeard	121 00		121 00
Newmarket	259 00	32 00	291 00
Niagara	174 00		174 00
North Bay	282 00	159 00	441 00
North Toronto	244 00		244 00
Oakville	186 00	23 00	209 00
Orangeville	312 00		312 00
Orillia	485 00	130 00	615 00
Oshawa	466 00	57 00	523 00
Owen Sound	1,072 00	70 00	1,142 00
Palmerston	171 00		171 00
Parkhill	138 00	29 00	167 00
Paris	368 00	52 00	420 00
Parry Sound	340 00		340 00
Pembroke	325 00	289 00	614 00
Penetanguishene	338 00		338 00
Perth	309 00	143 00	452 00
Peterborough	1,138 00	479 00	1,617 00
Petrolia	475 00		475 00
Pictou	380 00	38 00	418 00
Port Arthur	401 00	143 00	544 00
Port Hope	498 00		498 00
Prescott	249 00	102 00	351 00
Preston	238 00	54 00	292 00
Rainy River	170 00	(in town gt.)	170 00
Rat Portage	454 00	102 00	556 00
Renfrew	236 00	157 00	393 00
Ridgetown	274 00		274 00
Sandwich	88 00	110 00	198 00
Sarnia	855 00	117 00	972 00
Sault Ste. Marie	829 00	143 00	972 00
Seaforth	210 00	47 00	257 00
Simcoe	364 00		364 00
Smith's Falls	632 00		632 00
Stayner	139 00		139 00
Sturgeon Falls	105 00	153 00	258 00
St. Mary's	368 00	46 00	414 00
Strathroy	373 00		373 00
Sudbury	78 00	107 00	185 00
Thessalon	132 00		132 00
Thornbury	95 00		95 00
Thorold	166 00	83 00	249 00
Tillsonburg	272 00		272 00
Toronto Junction	842 00		842 00

APPORTIONMENT TO CITIES, TOWNS AND VILLAGES FOR 1904.—Continued.

TOWNS.—Continued.	Public Schools.	Separate Schools.	Total.
	\$ c.	\$ c.	\$ c.
Trenton	371 00	129 00	500 00
Uxbridge	192 00	.. ..	192 00
Vankleek Hill	127 00	152 00	279 00
Walkerton	252 00	113 00	365 00
Walkerville	193 00	.. ..	193 00
Wallaceburg	309 00	69 00	378 00
Waterloo	363 00	75 00	438 00
Welland	202 00	.. ..	202 00
Whitby	243 00	32 00	275 00
Warton	297 00	.. ..	297 00
Wingham	275 00	.. ..	275 00
Total	\$35,995 00	\$6,236 00	\$42,231 00
INCORPORATED VILLAGES.			
Acton	170 00	.. ..	170 00
Ailsa Craig	85 00	.. ..	85 00
Alvinston	97 00	.. ..	97 00
Arkona	54 00	.. ..	54 00
Arthur	77 00	65 00	142 00
Athens	107 00	.. ..	107 00
Ayr	102 00	.. ..	102 00
Bath	46 00	.. ..	46 00
Bayfield	65 00	.. ..	65 00
Beamsville	94 00	.. ..	94 00
Beaverton	90 00	.. ..	90 00
Beeton	81 00	.. ..	81 00
Belle River	7 00	59 00	66 00
Blyth	105 00	.. ..	105 00
Boboaygeon	108 00	.. ..	108 00
Bolton	78 00	.. ..	78 00
Bradford	116 00	.. ..	116 00
Bridgeburg	156 00	.. ..	156 00
Brighton	158 00	.. ..	158 00
Brussels	121 00	23 00	144 00
Burk's Falls	148 00	.. ..	148 00
Burlington	95 00	.. ..	95 00
Caledonia	146 00	.. ..	146 00
Campbellford	97 00	.. ..	97 00
Cannington	294 00	.. ..	294 00
Cardinal	152 00	.. ..	152 00
Casselman	154 00	.. ..	154 00
Cayuga	27 00	86 00	113 00
Chealey	113 00	.. ..	113 00
Chesterville	212 00	.. ..	212 00
Chippawa	108 00	.. ..	108 00
Clifford	64 00	.. ..	64 00
Cobden	72 00	.. ..	72 00
Colborne	86 00	.. ..	86 00
Creemore	120 00	.. ..	120 00
Delhi	71 00	.. ..	71 00
Drayton	96 00	.. ..	96 00
Dundalk	96 00	.. ..	96 00
Dutton	97 00	.. ..	97 00
Eganville	105 00	.. ..	105 00
Elmira	71 00	63 00	134 00
Elora	143 00	.. ..	143 00
Embro	70 00	.. ..	70 00
Erin	63 00	.. ..	63 00

APPORTIONMENT TO CITIES, TOWNS AND VILLAGES FOR 1904—Continued.

INCORPORATED VILLAGES.—Con.	Public Schools.	Separate Schools.	Total
	\$ c.	\$ c.	\$ c.
Exeter	230 00		230 00
Fenelon Falls	141 00		141 00
Fergus	169 00	10 00	179 00
Fort Erie	105 00		105 00
Garden Island	29 00		29 00
Georgetown	161 00		161 00
Glencoe	118 00		118 00
Grand Valley	98 00		98 00
Grimsby	111 00		111 00
Hagersville	115 00		115 00
Hastings	55 00	36 00	91 00
Hanover	178 00		178 00
Havelock	120 00		120 00
Hensall	88 00		88 00
Hintonburg	172 00	168 00	340 00
Holland Landing	50 00		50 00
Iroquois	119 00		119 00
Kemptville	160 00		160 00
Lakefield	142 00		142 00
Lanark	105 00		105 00
Lancaster	65 00		65 00
L'Orignal	110 00	36 00	146 00
Lucan	98 00		98 00
Lucknow	121 00		121 00
Madoc	135 00		135 00
Markdale	115 00		115 00
Markham	119 00		119 00
Marmora	98 00		98 00
Maxville	91 00		91 00
Merrickville	116 00		116 00
Merritton	157 00	41 00	198 00
Millbrook	106 00		106 00
Milverton	85 00		85 00
Morrisburg	185 00		185 00
Newboro'	54 00		54 00
Newburgh	68 00		68 00
Newbury	43 00		43 00
Newcastle	69 00		69 00
New Hamburg	153 00		153 00
Norwich	151 00		151 00
Norwood	105 00		105 00
Oil Springs	116 00		116 00
Omeme	75 00		75 00
Ottawa East	85 00	96 00	181 00
Paisley	121 00		121 00
Point Edward	128 00		128 00
Portsmouth	50 00	24 00	74 00
Port Carling	33 00		33 00
Port Colborne	151 00		151 00
Port Dalhousie	84 00	34 00	118 00
Port Dover	139 00		139 00
Port Elgin	162 00		162 00
Port Perry	171 00		171 00
Port Rowan	88 00		88 00
Port Stanley	66 00		66 00
Richmond	54 00		54 00
Richmond Hill	82 00		82 00
Rockland	18 00	141 00	159 00

APPORTIONMENT TO CITIES, TOWNS AND VILLAGES FOR 1904.—Concluded.

INCORPORATED VILLAGES.— <i>Con.</i>	Public Schools.	Separate Schools.	Total.
	\$ c.	\$ c.	\$ c.
Shelburne	143 00	.. .. .	143 00
Southampton	204 00	.. .. .	204 00
Springfield	59 00	.. .. .	59 00
Stirling	99 00	.. .. .	99 00
Stouffville	159 00	.. .. .	159 00
Streetsville	60 00	.. .. .	60 00
Sundridge	48 00	.. .. .	48 00
Sutton	77 00	.. .. .	77 00
Tara	79 00	.. .. .	79 00
Teeswater	116 00	.. .. .	116 00
Thamesville	96 00	.. .. .	96 00
Thedford	73 00	.. .. .	73 00
Tilbury	64 00	66 00	130 00
Tiverton	65 00	.. .. .	65 00
Tottenham	62 00	.. .. .	62 00
Tweed	125 00	30 00	155 00
Vienna	40 00	.. .. .	40 00
Wardsville	38 00	.. .. .	38 00
Waterdown	71 00	.. .. .	71 00
Waterford	127 00	.. .. .	127 00
Watford	167 00	.. .. .	167 00
Wellington	83 00	.. .. .	83 00
Weston	120 00	15 00	135 00
Winchester	144 00	.. .. .	144 00
Woodbridge	79 00	.. .. .	79 00
Woodville	62 00	.. .. .	62 00
Wyoming	89 00	.. .. .	89 00
Wroxeter	64 00	.. .. .	64 00
Total	\$13,563 00	\$993 00	\$14,556 00

SUMMARY OF APPORTIONMENT FOR 1904.

COUNTIES.	Public Schools.	Separate Schools.	Totals.
	\$ c.	\$ c.	\$ c.
1. Brant	1,571 00	.. .. .	1,571 00
2. Bruce	4,013 00	433 00	4,446 00
3. Carleton	2,927 00	480 00	3,407 00
4. Dufferin	1,853 00	.. .. .	1,853 00
5. Elgin	2,895 00	.. .. .	2,895 00
6. Essex	2,941 00	1,057 00	3,998 00
7. Frontenac	2,289 00	174 00	2,463 00
8. Grey	5,719 00	115 00	5,834 00
9. Haldimand	1,780 00	.. .. .	1,780 00
10. Haliburton	728 00	.. .. .	728 00
11. Halton	1,406 00	.. .. .	1,406 00
12. Hastings	3,949 00	97 00	4,046 00
13. Huron	4,850 00	188 00	5,038 00
14. Kent	3,788 00	227 00	4,015 00
15. Lambton	3,957 00	26 00	3,983 00
16. Lanark	2,231 00	45 00	2,276 00
17. Leeds and Grenville	3,902 00	98 00	4,000 00
18. Lennox and Addington	2,088 00	42 00	2,130 00
19. Lincoln	1,487 00	.. .. .	1,487 00

SUMMARY OF APPORTIONMENT FOR 1904---Concluded.

COUNTIES,--Con.	Public Schools.	Separate Schools.	Total.
	\$ c	c	\$ c
20. Middlesex	4,904 00	111 00	5,015 00
21. Norfolk	2,444 00	46 00	2,490 00
22. Northumberland and Durham	4,693 00	79 00	4,772 00
23. Ontario	3,256 00	60 00	3,316 00
24. Oxford	3,377 00		3,377 00
25. Peel	1,855 00	13 00	1,868 00
26. Perth	3,290 00	144 00	3,434 00
27. Peterborough	2,225 00	21 00	2,246 00
28. Prescott and Russell	2,040 00	1,925 00	3,965 00
29. Prince Edward	1,517 00		1,517 00
30. Renfrew	3,831 00	337 00	4,168 00
31. Simcoe	5,866 00	124 00	5,990 00
32. Stormont, Dundas and Glengarry	5,452 00	497 00	5,949 00
33. Victoria	2,375 00		2,375 00
34. Waterloo	2,415 00	264 00	2,679 00
35. Welland	1,881 00		1,881 00
36. Wellington	3,573 00	117 00	3,690 00
37. Wentworth	2,696 00	6 00	2,702 00
38. York	4,920 00	33 00	4,950 00
Total	\$116,991 00	\$6,759 00	\$123,750 00
39. Districts:--			
(a) Algoma	(f) Thunder Bay		
(b) Muskoka	Exclusive of the		
(c) Nipissing.	towns and vil-	38,800 00	1,200 00
(d) Parry Sound	ages which appear		40,000 00
(e) Rainy River	in the general		
	list		
Total	38,800 00	1,200 00	40,000 00
GRAND TOTALS.			
COUNTIES	\$116,991 00	\$6,759 00	123,750 00
CITIES	49,165 00	12,327 00	61,492 00
TOWNS	35,995 00	6,236 00	42,231 00
VILLAGES	13,563 00	993 00	14,556 00
DISTRICTS	38,800 00	1,200 00	40,000 00
Totals	\$254,514 00	\$27,515 00	\$282,029 00

EXAMINATIONS, 1905. PRESCRIBED TEXTS.

DISTRICT CERTIFICATE.

SCOTT, The Lady of the Lake.

PART II.—JUNIOR LEAVING.

English :

LONGFELLOW, Evangeline, The Day is Done, The Old Clock on the Stairs, The Fire of Driftwood, Resignation, The Warden of the Cinque Ports, The Bridge, A Gleam of Sunshine.

WORDSWORTH, "Three years she grew in sun and shade," "She was a Phantom of delight," "There is a Flower, the lesser Celandine" To a Sky-

lark, ("Ethereal minstrel ! pilgrim of the sky !"), The Green Linnet, to the Cuckoo, "With little here to do or see."

SHAKESPEARE, Macbeth.

Latin :

CORNELIUS NEPOS, Lives of Themistocles and Aristides ; CÆSAR, Bellum Gallicum, Bk. IV. (omitting Chap. 17), and Bk. V., Chaps. 1-23 ; VERGIL, Æneid, Bk. II. (1-505.)

Greek :

Selections from XENOPHON, Anabasis I, in White's Beginner's Greek Book (pp. 304-428), with the Exercises thereon ; HOMER, Iliad I.

German :

GRIMM, Rotkäppchen ; ANDERSEN Wie's der Alte machth, Des neue Kleid, Venedig Rothschild, Der Bär ; ERTL, Himmelsschlüssel ; FROMMEL, Das eiserne Kreuz ; BAUMBACH, Nicotiana, Der Goldbaum ; HEINE, Lorelei, Du bist wie eine Blume ; UHLAND, Schäfer's Sonntagslied, Das Schloss am Meer ; CHAMISSO, Das Schloss Boncourt ; CLAUDIUS, Die Sterne, Der Riese Goliath ; GOETHE, Mignon, Erbkönig, Der Sänger ; SCHILLER, Der Jüngling am Bache.

LEANDER, Träumereien, pp. 45-90 (selected by Van Daell.)

French :

LAMENNAIS, Paroles d'un croyant, Chaps. VII. and XVII. ; PERRAULT, le Maître Chat ou le Chat Botté ; DUMAS, Un nez gelé, and la Pipe de Jean Bart ; ALPHONSE DAUDET, la Dernière classe, and la Chèvre de M. Seguin ; LEGOUVE, la Patte de dindon ; POUVILLON, Hortibus ; LOTI, Chagrin d'un vieux forcat ; MOLIERE, l'Avare, Acte III. sc. 5 (Est-ce à votre cocher . . . sous la mienne) ; VICTOR HUGO, Waterloo, Chap. IX. ; ROUGET DE L'ISLE, la Marseillaise ; ARNAULT, la Feuille ; CHATEAUBRIAND, l'Exilé ; THEOPHILE GAUTIER, la Chimère ; VICTOR HUGO, Extase ; LAMARTINE, l'Automne ; DE MUSSET, Tristesse ; SULLY PRUDHOMME, le Vase brisé ; LA FONTAINE, le Chêne et le Roseau.

ERCKMANN-CHATRAIN, Contes fantastiques, pp. 3-69, 121-138, ed by E. S. Joynes (Holt & Co.)

SENIOR LEAVING.

English :

LONGFELLOW, Evangeline, The Day is Done, The Old Clock on the Stairs, The Fire of Driftwood, Resignation, The Warden of the Cinque Ports, The Bridge, A Gleam of Sunshine.

WORDSWORTH, "Three years she grew in sun and shade," "She was a Phantom of delight," "There is a Flower, the lesser Celandine," To a Skylark ("Ethereal minstrel ! pilgrim of the sky ;"), The Green Linnet, To the Cuckoo, "With little here to do or see."

SHAKESPEARE : Macbeth, Richard II.

Latin :

CORNELIUS NEPOS, Lives of Themistocles and Aristides ; CÆSAR, Bellum Gallicum, Book IV., omitting Chap. 17 and Book V., Chaps. 1-23 ; VIRGIL, Æneid II., lines 1-505 ; HORACE, Odes I. and II. ; CICERO, In Catilinam I. and III., IV.

Greek :

XENOPHON, Anabasis I, (Chaps. I.-VIII.) ; HOMER, Iliad I., Odyssey XIX. ; LUCIAN, Charon (Heitland) ; LYSIAS, Contra Eratoshenem.

French :

LAMENNAIS, *Paroles d'un croyant*, Chaps. VII. and XVII.; PERRAULT, *le Maître Chat on le Chat Botté*; DUMAS, *Un nez gelé*, and *la Pipe de Jean Bart*; ALPHONSE DAUDET, *la Dernière classe*, and *la Chèvre de M. Seguin*; LEGOUVE, *la Patte de dindon*; POUVILLON, *Hortibus*; LOTI, *Chagrin d'un vieux forcat*; MOLIERE, *l'Avare*, Acte III., sc 5 (*Est-ce à votre cocher . . . sous la mienne*); VICTOR HUGO, *Waterloo*, Chap. IX.; ROUGET DE L'ISLE, *la Marseillaise*; ARNAULT, *la Feuille*; CHATEAUBRIAND, *l'Exilé*, THEOPHILE GAUTIER, *la Chimère*; VICTOR HUGO, *Extase*; LAMARTINE, *l'Automne*; De MUSSET, *Tristesse*; SULLY PRUDHOMME, *le Vase brisé*; LA FONTAINE, *le Chêne et el Roseau*.

ERCKMANN-CHATRAIN. *Contes fantastiques*, pp. 3-69, 121-138, ed. E. S. Joynes (Holt & Co.)

FRANCOIS COPPEE, *Contes Choises*, ed. by Margaret F. Skeat (Macmillan).

German :

GRIMM, *Rotäppchen*; ANDERSEN, *Wie's der Alte macht*, *Das neue Kleid*, *Venedig*, *Rothschild*, *Der Bär*; ERTL, *Himmelsschüssel*; FROMMEL, *Das eiserne Kreuz*; BAUMBACH, *Nicotiana*, *Der Goldbaum*; HEINE, *Lorelei*, *Du bist wie eine Blume*; UHLAND, *Schäfer's Sonntagslied*, *Das Schloss am Meer*; CHAMISSE, *Das Schloss Boncourt*; CLAUDIUS, *Die Sterne*, *Der Riese Goliath*; GOETHE, *Mignon*, *Erlkönig*, *Der Sänger*; SCHILLER, *Der Jüngling am Bache*.

LEANDER, *Träumereien*, pp. 45 to 90 (selected by Van Daell).

BAUMBACH, *Der Schwiegersohn*; ELZ, *Er ist nicht eifersüchtig*; WICHERT, *Post Festum*.

Toronto, June, 1904.

TEXT-BOOKS AUTHORIZED FOR USE IN PUBLIC SCHOOLS, HIGH SCHOOLS, AND TRAINING SCHOOLS.

Approved July, 1904.

1. The text-books named in Schedule "A" shall be the authorized text-books for Public Schools. Pupils taking any optional subject in the Public School course may use the text-book authorized in such optional subject. The text-books in French and German are authorized only for schools where the French or German language prevails and where the Trustees, with the approval of the Inspector, require French or German to be taught in addition to English. Text-books marked "optional" shall be introduced into the Public Schools only by resolution of the Board of Trustees. Books authorized in the Lower School of the High School course may be used by pupils taking the corresponding subjects of Continuation classes.

2. The text-books named in Schedule "B" shall be the only authorized text-books in High Schools and Collegiate Institutes for the course of study prescribed in the Lower and Middle Schools. *Books authorized for use in the Public Schools may be used in the Lower School and it is recommended that so far as the Principal may deem desirable, these books be used for the first year instead of the corresponding High School books. For the second special course or more advanced work in the Commercial department, any books recommended by the Principal may be used, with the approval of the High School Board.*

3. The text-books named in Schedule "C" shall be the authorized text-books for Model Schools, Normal Schools and the Ontario Normal College. Only such books shall be used by the teachers-in-training as may be ordered by the Principal.

4. Any text-books used in any school before the 1st July, in 1904, and recommended by resolution of the Trustees to be continued in use, shall be deemed as authorized in such school until further notice. The vertical or slanting copy books heretofore authorized, and published by the Rose Publishing Company, may be used in any Public School.

5. For religious instruction, either the Sacred Scriptures, or the Scripture Readings adopted by the Education Department, shall be used as prescribed by the Regulations of the Education Department.

PUBLIC SCHOOLS. (SCHEDULE A.)

First Reader, Part I., or A Modern Phonic Primer, Part I. (Morang) or The Public School Phonic Reader, Part I.....	\$0 10
First Reader, Part II., or Public School Phonic Primer, Part II., or A Modern Phonic Primer, Part II. (Morang).....	0 15
Second Reader	0 20
Third Reader	0 30
Fourth Reader	0 40
High School Reader	0 50
Public School Arithmetic	0 25
Public School Algebra and Euclid	0 25
Public School Geography, or Morang's Modern Geography.....	0 75
Our Home and its Surroundings (for Junior Classes)	0 40
Public School Grammar	0 25
Morang's Modern English Grammar	0 60
Public School History of England and Canada	0 30
History of the Dominion of Canada (Fifth Form)	0 50
Public School Drawing Course, each number.....	0 05
Public School Physiology and Temperance	0 25
Public School Copy Book	0 07
Practical Speller	0 25
Public School Bookkeeping	0 25
Public School Agriculture	0 30
Public School Domestic Science (optional)	0 50

French-English Readers

First Reader, Part I.....	0 10
First Reader, Part II.....	0 15
Second Reader.....	0 25
Third Reader	0 35

German-English Readers.

Ahn's First German Book	0 25
Ahn's Second German Book	0 45
Ahn's Third German Book	0 45
Ahn's Fourth German Book	0 50
Ahn's First German Reader	0 50

HIGH SCHOOLS AND COLLEGIATE INSTITUTES. (SCHEDULE B.)

English.

High School Reader	0 50
High School English Grammar	0 75
High School English Composition	0 50
Elementary English Composition (Sykes)	0 40
High School Composition from Models	0 75

History and Geography

High School Geography (Chase)	\$1 00
Morang's Modern Geography.....	0 75
High School History of England and Canada.....	0 65
Wrong's "The British Nation"	1 00
Myers' Ancient History—Greece and Rome—Can. Ed'n.....	0 75
Botsford's Ancient History for Beginners (Morang).....	1 00
History of the Dominion of Canada—Clement	0 50

Mathematics.

High School Arithmetic	0 60
Arithmetic for High Schools, De Lury	0 60
High School Algebra	0 75
Elements of Algebra, McLellan	0 75
Elementary Plane Geometry, Baker	0 50
High School Euclid, J. S. McKay, or by A. C. McKay and B. A. Thompson (Books I., II., III., 50 cents)	0 75

Classics.

First Latin Book and Reader	1 00
Primary Latin Book and Reader.....	1 00
White's First Green Book	1 25
High School Beginner's Greek Book	1 50

Moderns.

High School French Grammar and Reader.....	1 00
High School German Grammar and Reader	1 00

Science

High School Physical Science, Part I., 50 cents; Part II.....	0 75
High School Botany, Part II.....	0 60
High School Chemistry	0 50

Bookkeeping and Drawing

High School Bookkeeping.....	0 60
High School Drawing Course, each number	0 10

Cadet Drill.

High School Cadet Drill Manual (optional)	0 40
---	------

TRAINING SCHOOLS. (SCHEDULE C.)

County Model Schools.

School Management, Millar.....	1 00
Methods in Teaching, Edited by Tilley	1 50
Public School Physiology and Temperance	0 25
New Psychology, (Chapters 4, 5 and 6 omitted) Gordy.....	1 25
Steps in the Phonic System, Cullin & Niven	0 50
Elementary Phonetics, Burt	0 35
Elementary Treatise on Arithmetic, Taylor	0 50
Mental Arithmetic, McLellan & Ames.....	0 30
Algebraical Exercises, Barnes	0 30
Introductory Geometry, McLean	0 50
A Guide to Nature Study, Crawford	0 90

Normal Schools.

Lectures on Teaching, Fitch.....	1 00
School Management, Millar	1 00

Normal Schools.—Continued.

Educational Reformers, Quick	\$1 50
Applied Psychology, McLellan	1 00
First Year at School, Sinclair	0 50
High School Cadet Drill Manual	0 40
Hints on Teaching Arithmetic, McLean	0 50
Public School Domestic Science	0 50

Ontario Normal College.

Applied Psychology, McLellan	1 00
Education, Spencer	0 50
School Management, Millar	1 00
School Management, Landon	1 50
Educational Reformers, Quick	1 50
High School Cadet Drill Manual	0 40
Physical Culture, Houghton	0 50
Physical Education, MacLaren, Part II., sections II. and III.	2 00

TEACHERS' READING COURSE FOR 1905. (SCHEDULE D.)

Science of Education (Sinclair)	1 00
A New School Management (Seeley)	1 25
Common Sense Didactics (Sabin)	1 25

LIST OF APPARATUS.

REQUIRED TO PERFORM THE EXPERIMENTS IN THE ELEMENTARY SCIENCE OF
THE FIFTH FORM PUBLIC SCHOOL COURSE, AND OF THE
LOWER SCHOOL OF THE HIGH SCHOOL.

	Probable Cost.
1 Metric Scale, one foot long. The ordinary School Ruler graduated in inches and centimeters will answer	\$0 02
1 Metric Stick	0 50
1 Dissected Litre Block	2 00
1 Test Tube on Foot	0 10
1 Pinch-Cock	0 15
1 Burette, Mohr's, 50 C. C. graduated in tenths	2 00
1 Measuring Cylinder, 100 C. C. graduated	0 20
3 Beakers, different sizes	0 55
1 Air Pump and Receiver	10 00
1 Elastic Rubber Balloon. A toy balloon answers well	0 10
1 Pendulum Bob	0 25
1 Tuning Fork, Simple Form	0 20
2 Bar Magnets	0 50
1 Physical balance, with set of Metric Weights	8 50
1 Spirit Lamp or Bunsen Burner	0 40
1 Calliper, Simple Form	0 50
1 Glass Battery Jar, 9 in. deep, 8 in. diam.	0 50
1 Mortar and Pestle	0 35
$\frac{3}{4}$ Pound Glass Tubing, assorted sizes	0 50
2 Thistle Tubes	Each 15c. 0 30
1 Transmission of Pressure Apparatus	0 75
1 Archimedes Principle	1 75
1 Globe for weighing air	3 00
1 Barometer Tube, heavy glass	0 50
1 Mariotte's Law Tube	1 50
1 Retort Stand, (two rings)	0 50
3 Small Florence Flasks with perforated rubber corks to fit	0 45
1 Florence Flask with wide mouth	0 25
1 Hydrometer Jar	0 45
1 Rubber Cork with two holes to fit Florence Flask with large mouth	0 15
1 Weighted Wooden Prism, 1 square Centimeter in sections	0 25
2 Grenet Cells	Each 2.50 5 00

LIST OF APPARATUS.—*Continued.*

	Probable Cost
1 Ball and ring	1 00
Compound Bar	1 00
1 Thermometer, graduated in both Centigrade and Fahrenheit Degrees	1 00
1 Calorimeter	2 00
1 Conductometer	1 50
1 Tripod	0 40
1 Horse-shoe Magnet	0 25
1 Compass	0 25
1 Dipping Needle	2 50
1 Decomposition of Water Apparatus	1 50
1 Bar, Soft Iron (round, 6 in. long)	0 20
1 Electric Bell, (small)	1 00
1 Plane Mirror, (small)	0 25
1 Concave Mirror	1 50
1 Prism	0 50
1 Lift Pump, Glass Model	1 25
1 Force Pump " "	1 25
1 Hydraulic Press, Glass Model	2 00
1 Pneumatic Trough	0 40
4 Glass Bottles. (Pickle bottles will answer)	0 10
4 Glass Slips, 2 inches square, to cover mouth of bottles	0 05
1 Filter Funnel	0 10
2 Test Tube Cleaners	0 20
2 Dos Test Tubes 6 in. x $\frac{3}{8}$ in. with 3 perforated rubber corks to fit.	0 50
1 Evaporating Dish	0 20
3 Hand Glass Test Tubes	0 30
1 Test Tube Rack	0 25
2 Test Tube Clamps, (wire)	0 30
4 Reagent Bottles 4 oz.	0 50

SUNDRIES.

File, 3 cornered	0 10
Rubber Tubing for connections	0 50
Sheet Rubber	Per sq. foot
Wire Gauze	" "
Insulated Copper Wire	0 10
Sealing Wax	Large stick
Iceland Spar	0 65
Mica	0 10
Sheet Zinc and Sheet Copper, (Pair Elements)	0 15
2 Small Vises for clamping wires	0 80
Piano Wire, 1 spool	0 10
Lodestone, small	0 50
Mercury, 2 lbs.	2 00

CHEMICALS.

$\frac{1}{2}$ lb. Zinc, granulated, $\frac{1}{2}$ lb. Iron filings.
$\frac{1}{2}$ lb. Pot. Chlorate, $\frac{1}{2}$ lb. Manganese Dioxide.
$\frac{1}{2}$ lb. Ammon. Chloride, $\frac{1}{2}$ lb. Lime.
1 lb. Marble, (Limestone will answer).
1 oz. Yellow Phosphorus, 2 oz. Red Oxide of Mercury.
2 oz. Caustic Potash, 8 oz. Limewater.
1 Book each, red and blue Litmus Paper.
6 oz. each of Hydrochloric, Nitric, and Sulphuric Acids.
2 oz. Roll Sulphur, 1 Package Filter paper, (round).
$\frac{1}{2}$ gal. Battery Fluid for Grenet cells, 6 oz. Liquor Ammonia.

BOTANY AND ZOOLOGY.

For the work in Botany and Zoology it is desirable that each Pupil should have a pocket magnifier (30-50 cents). A compound microscope (\$11.00) should also form part of the school equipment for this work.

These, together with a dozen glass slips and cover glasses, and a couple of needles mounted in wooden handles will be found to be all that is necessary for the course. Breeding cages for observing the development of insects may be made from waste crayon boxes or soap boxes by covering one side or end with mosquito netting or a pane of glass.

GENERAL.

A small cupboard should be provided for storing apparatus and chemicals, and a simple laboratory table for carrying out experiments should be in every school where there is no laboratory.

Toronto, August, 1904.

COURSES FOR COMMERCIAL AND ART SPECIALISTS.

Reg. 52. Any person who passes the examination in the subjects set forth in Circular No. 2—Courses for Commercial and Art Specialists—(each paper being valued at 100, and the standard being 40 per cent. in each and 60 per cent. of the aggregate, with 75 per cent. in honors), and who is holder of a High School Assistant's certificate shall be entitled to an Interim Commercial or Art Specialist's certificate.

After the examinations of 1905 the following shall be the details of each course.

I. COMMERCIAL COURSE.

(i) BOOK-KEEPING.

Theoretical Book-keeping. Single and double entry; general merchandising, commission business, manufacturing; single proprietor, partnership and corporation accounting, and changing from one form of ownership to another; plant, labor, material, and departmental accounts; practical treatment of such accounts as bank, discount, freight, suspense, bad debts, depreciation, etc., columnar cash books, journals, etc., and the various forms of books necessary for the different kinds of business; manufacturing, trading, and profit and loss accounts, balance sheets; statements of income and expenditure, and of receipts and disbursements. (One paper.)

Practical Book-keeping. Making the proper records and financial statements from given data. This may take the form of separate questions and problems, or of a set covering a certain period of time (One paper).

(ii) PENMANSHIP.

Theory and practice of penmanship; position and movement; principles of letter formation; graceful, legible business writing; ledger headings, figures, marking and engrossing (One paper).

(iii) MERCANTILE ARITHMETIC.

Interest, discount, annuities certain, sinking funds, formation of interest and annuity tables, the application of logarithms, stocks and investments, partnership settlements, partial payments, equating or averaging accounts, exchange, practical measurements, and the metric system. (One paper).

(iv.) GENERAL COMMERCIAL KNOWLEDGE.

Business Papers. Receipts, releases, promissory notes, chattel notes, lien notes, instalment notes, drafts, bills of exchange, orders, due bills, deposit slips, checks, bank drafts, draft requisition deposit, receipts, bank pass books, bills, invoices, credit invoices, accounts, monthly statements, warehouse receipts, bills of lading, freight bills, proxies, power of attorneys, agreements, bonds, debentures, leases, instalment scrips, stock certificates, stock transfers.

Business Laws, Banking, etc. Negotiable paper, indorsement, acceptance, discharge, dishonor, protest, negotiability and assignability, accommodation paper, statute of limitations, statute of frauds, interest, money, payments, collection of accounts, partnership, joint stock companies, insurance; liability as partner, shareholder, director, agent, indorser, etc.; contracts—kinds, parties to, consideration, etc.; property, real and personal: mortgages, chattel and real estate; guarantee and suretyship; shipper and carrier; mechanics' lien; landlord and tenant—rights, duties and liabilities; principal and agent—relation to each other and to third parties; master and servant—relations, rights, duties, and liabilities; wills and succession duties; copyrights, trade marks, industrial designs, patent rights—purpose and legal requirements; banking—organization, business, note issue, redemption fund, crossed checks, etc.; balance of trade—meaning, and effect on an exchange.

Statutory Requirements. Relating to companies, partnerships, insolvency, and winding up acts. (One paper).

(v.) AUDITING.

Object, scope, and advantages of an audit; preliminary steps; instructions to the book-keeper before an audit; continuous and complete audits; relation to prior audits; vouchers; trial balances and balanced books; individual, partnership, and company ownership; methods of accounting; different classes of audits, as commercial, mining, financial; valuation and verification of assets and liabilities; depreciation, discounts, bad and doubtful debts, reserve funds, etc.; preliminary expenses, directors' fees, etc.; foreign exchange; nature of profits; forms of accounts and balance sheets; auditors' reports, recommendations, and certificates. (One paper).

(vi.) ECONOMICS.

The principles of production, distribution, exchange and consumption; value and price; land, labor, and capital; rent, wages, and interest; monopolies, etc. (One paper).

(vii.) STENOGRAPHY.

Theory. The principles of Phonography by Isaac Pitman.

Practice. Writing from dictation at a speed of sixty words per minute, and accurate transcription into long hand at a speed of twelve words per minute; the dictated matter to comprise business correspondence and legal documents. (Two papers).

(viii.) HISTORY OF COMMERCE, AND TRANSPORTATION.

Ancient and mediaeval commerce; commercial significance of the great geographical discoveries of the fifteenth century; the Dutch commercial ascendancy; struggle of the English, French, and Dutch for the

first place in commerce ; the English industrial revolution ; commercial significance of the Napoleonic wars ; England's industrial and commercial supremacy ; French industry and commerce since the overthrow of Napoleon ; the German Empire and its commercial position ; recent economic growth of Russia ; the Balkan States, and the commercial position of South America, Africa, Asia and Oceania. The growth of commerce and the distribution agencies of Canada and the United States ; markets and public carriers ; growth of the factory system and its relation to agriculture and the development of transportation facilities ; relation of waterways to railways and the distribution of the waterways of the country and their effect on domestic commerce. (One paper).

NOTE.—The examinations for commercial specialists will be held in July at the same centres as the other departmental examinations.

BOOKS OF REFERENCE RECOMMENDED.

- Canadian Accountant. J. W. Johnston, Belleville.
 Canadian Standard Bookkeeping. J. W. Westervelt, London.
 Joint Stock Company Accounts. D. Hoskins, Toronto.
 Accounting in Theory and Practice. Geo. Lisle. Wm. Green & Co., Edinburgh.
 Penman's Art Journal, (commence with September No.) 203 Broadway, New York.
 The Theory of Finance. Geo. D. King, C. & E. Layton, Farringdon St., London, E.C., Eng.
 Digest of Canadian Mercantile Law. W. H. Anger, Toronto.
 Shareholders' Manual. J. D. Warde, Toronto.
 Assignments Act. Cassels. Hunter, Rose & Co., Toronto.
 Auditing (chapters 1, 2, 3, 6, 7, 8). L. R. Dicksee. Gee & Co., London, E.C., Eng.
 Elements of Political Economy. James Bonar. John Murray, Albermarle St., London, Eng.
 Shorthand Instructor. Sir Isaac Pitman. The Copp, Clark Co., Toronto.
 The History of Commerce in Europe. H. de B. Gibbins. The Macmillan Co., London, Eng.
 NOTE.—For The Winding-up Act, see R. S. O.

II. ART COURSE.

(i) FREEHAND DRAWING.

With pencil, pen and ink, charcoal, and black crayon.

- Drawing of common objects from observation and from memory.
 Imaginative Drawing. Illustration of stories.
 Principles of Perspective.
 Outdoor sketching. Sketching through school windows.
 Drawing from the cast and the human figure.
 Rapid memory sketches of figures in motion.
 Composition.
 Representation of flat and relief maps. (Two papers).

(ii.) CLAY MODELLING.

- Common objects. Relief maps. Modelling from the cast.

(iii.) COLOR DRAWING.

Suggestion of form with brush and ink ; representation of common objects in monochrome tints ; primary, secondary, and tertiary colors ; proper combination of colors ; watercolor and colored crayon drawings of common objects ; outdoor sketching ; sketching through the school windows. (One paper.)

(iv.) INDUSTRIAL DESIGN.

In outline and color.

Practical geometry as far as necessary for construction of designs ; principles of design and anatomy of patterns ; units of design adapted from practical and geometrical forms ; designs for floorcloths, wall paper, book-covers, advertisements, etc. (One paper).

(v.) GEOMETRICAL AND MECHANICAL DRAWING.

Problems in practical geometry and perspective ; orthographic and isometric projection ; drawing from specifications ; simple machine drawing ; simple architectural drawing. (One paper).

(vi.) DRAWING ON THE BLACKBOARD.

With white chalk and colored crayons.

Common objects : illustration of nature study, geography, etc.

(vii.) HISTORY OF ART.

An outline of the origin and development of Architecture, Sculpture, and Painting, with some knowledge of the life and works of the great artists of each of the leading periods. (One paper).

NOTE.—(1).—All the examinations for art specialists will be held in July at the Toronto Normal School.

(2).—The examinations in clay modelling, in sketching, and in drawing on the blackboard will be practical.

BOOKS OF REFERENCE RECOMMENDED.

Light and Shades. Cross. Ginn & Co., Boston.
 New Drawing Course. Vaughan. Nelson & Son, London., Eng.
 Clay Modelling. Holland. Ginn & Co., Boston.
 Manual of Clay Modelling. Unwin. Longmans, Green & Co., London and New York.
 Elementary Brushwork Studies. Yeats. Philip & Son, London, Eng.
 Brushwork Studies. Yeats. Philip & Son, London, Eng.
 Color Study. Cross. Ginn & Co., Boston.
 Design and the Making of Patterns. Hatton. Chapman & Hall, London, Eng.,
 Science and Art of Drawing. Spanton. The MacMillan Co.
 Perspective Drawing. Spanton. The MacMillan Co.
 Mechanical Drawing. Spanton. The MacMillan Co.
 Blackboard Drawing. Seaby. Nelson & Son.

Blackboard Drawing. Whitney. Davis Press, North Scituate, Mass.
 Architectural Drawing. Edminster. The Pratt Institute, Brooklyn,
 N. Y.

History of Art. DeForest. Dodd, Mead & Co., New York.

Toronto, September, 1904.

DEPARTMENTAL INSTRUCTIONS.

HIGH SCHOOL ENTRANCE EXAMINATION, 1905.

1. The High School Entrance examinations for 1905 will begin on Wednesday, the 28th of June, at 8.45 a.m., and will be conducted under the provisions of Section 41 of the High School Act and Sections 23-28 of the Regulations, subject to the instructions herein contained.

2. Candidates who purpose writing at the examination must notify the Public School Inspector before the 1st of May.

3. A teacher who has pupils writing at the High School Entrance examination, shall not be eligible to act as an Examiner or Presiding Officer where such pupils are writing.

4. When the County Council recommends the holding of an examination at any place other than the High School, the Presiding Officer shall be paid the sum of \$3 per diem, and travelling expenses for conducting such examination, and the Examiners shall be allowed the sum of \$1 per candidate for reading the answer papers. It shall be lawful for the County Treasurer to pay all the expenses of such examination on the certificate of the County Inspector.

SELECTIONS FOR MEMORIZATION.

Ontario Fourth Reader.

1905.—VII. Boadicea; XIV. Lament of the Irish Emigrant; XXIX. For a' That and a' That; XLVI. Lead Kindly Light; LIV. Lochinvar; LXXXIII. The Influence of Beauty; Sonnet—Night (page 302); CV. Elegy, Written in a Country Churchyard.

1906.—II. I'll Find a Way or Make It; VII. Boadicea; XXI. Oft in the Stilly Night; XXXV. Resignation; XL. Ring out Wild Bells; L. The Prairies; LVI. The Honest Man; LXXXII. The Ocean.

SELECTIONS FOR MEMORIZATION.

Canadian Catholic Fourth Reader.

1905.—VI. Lead, Kindly Light; X. Flow Gently, Sweet Afton; XXXV. Step by Step; LI. Song of the River; LIII. As I Came Down from Lebanon; CI. Inscription for a Spring; CXV. The Bells of Shandon; CXVIII. Elegy, Written in a Country Churchyard.

1906.—VI. Lead Kindly Light; XXVII. Under the Violets; LXXXI. The Angelus; LXXV. To the Dandelion; CXVI. Veni Creator; XCIV. The Combat; LXXXV. A Psalm of Life; LXXXIII. Waterloo.

Duties of Inspector.

5. The Inspector shall notify the Department not later than the 3rd day of May in each year of the number of persons desiring to be examined at any High School or other authorized place within his jurisdiction.

6. In any city or town forming a separate inspectoral division, the Inspector or Inspectors of such city or town shall preside at the examinations, and in conjunction with the Board of Examiners for such city or town shall read the papers and report to the Department.

7. In counties in which more High Schools than one are situated the Inspector for the county shall elect at which High School he will preside, and shall notify the Department of the choice he makes, and in each of the other High Schools the Principal of the High School shall preside.

8. In the case of examinations affiliated with a High School, the Inspector, within whose district such affiliated examinations are held, shall appoint Presiding Officers, who shall be teachers in actual service, notice of which shall be sent to the Education Department; and such Inspector, together with the Examiners of the High School with which the examination is affiliated, shall be the Board of Examiners in all such cases.

9. Where from the number of candidates, or any other cause, additional Presiding Officers are required, the Inspector shall make such appointments as are necessary, preference being given to the other members of the Board of Examiners.

10. Where more examinations than one are held in an inspectoral division, the papers will be sent by the Education Department to the Inspector or the Presiding Officer, as the case may be.

11. The parcel containing the examination papers shall not be opened till the morning of the examination day, nor shall any envelope containing the papers in any subject be opened until the time appointed in the timetable for the examination in such subject.

Duties of Presiding Officers.

12. To be in attendance at the place appointed for the examination at least fifteen minutes before the time fixed for the first subject, and to see that the candidates are supplied with the necessary stationery and seated so far apart as to afford reasonable security against copying.

13. To open the envelope containing the papers in each subject in full view of the candidates, at the time prescribed, and to place one paper on each candidate's desk.

14. To exercise proper vigilance over the candidates to prevent copying, and to allow no candidate to communicate with another, nor permit any person except another Presiding Officer to enter the room during the examination.

15. To see that the candidates promptly cease writing at the proper time, fold and endorse their papers properly, and in every respect comply with the instructions herein contained.

16. To submit the answers of the candidates to the Examiners according to the instructions from the Board.

Duties of Candidates.

17. Every candidate should be in attendance at least fifteen minutes before the time at which the examination is to begin, and shall occupy the seat allotted by the Presiding Officer. Any candidate desiring to move

from his allotted place or to leave the room shall first obtain permission from the Presiding Officer to do so. Any candidate leaving shall not return during the examination in the subject then in hand.

18. Every candidate shall write his answers on one side only of the paper, and number each answer. He shall arrange the sheets numerically, according to the question, and fold them once crosswise, endorsing them with his name, the name of the subject, and the name of the place at which he is examined. A paper shall not be returned to a candidate after being placed in the hands of the Presiding Officer.

19. Any candidate who is found copying from another or allowing another to copy from him, or who brings into the examination room any book, note or paper having any reference to the subject on which he is writing, shall be required by the Presiding Officer to leave the room, and his paper and the papers of all the guilty parties shall be cancelled.

Duties of Examiners.

20. The papers of the different candidates shall be so distributed that the same examiner shall read and value the answers in the same subject throughout.

21. Marks are to be deducted for mis-spelt words and for want of neatness as indicated in regulation 27.

22—(a) The reports of the examiners are to be sent (*by mail*) to the Education Department on or before the 25th day of July by the Public School Inspector.

(b) The bag which contains the question papers is to be returned to the Department (charges prepaid) *at the same time* as the reports are sent.

(c) The answer papers of candidates, unless when specially requested, are not to be forwarded to the Department, but are to be retained by the Inspector until the 1st day of October, *after which no case is to be re-considered.*

(d) The Inspector shall issue a certificate to each candidate who passes the High School Entrance examination.

TIME TABLE.

HIGH SCHOOL ENTRANCE.

First Day.

A.M.	8.45.....	Reading Instructions.
	9.00—11.00.....	Composition.
	11.10—12.40....	Geography.
P.M.	2.00—4.00.....	English Grammar.
	4.10—4.40.....	Spelling.

Second Day.

A.M.	9.00—11.00....	Arithmetic.
	11.10—12.00.....	Writing.
P.M.	2.00—4.00.....	Reading (Written).

Reading (oral) may be taken on the above days at such hours as may suit the convenience of the examiners.

Toronto, October, 1904.

EXAMINATIONS.

INSTRUCTIONS TO PRESIDING OFFICERS, 1905.

Presiding Officers are requested to peruse carefully the following instructions and see that they are fully carried out :—

(1) Each Inspector or such other persons as may be appointed by the Minister, shall receive from the Department or the Inspector, the examination papers, and shall thereupon be responsible for the safe keeping of the bag and its contents until the examination is concluded.

(2) On the receipt of the bag containing the question papers the Presiding Officer will see that *the seal is intact*. The bag can be opened by breaking the wire close to the seal, and when opened the names and numbers of the envelopes containing the question-papers should be verified with the time-table.

(3) The Presiding Officer will satisfy himself that all necessary arrangements are made by the School Board in due time for the examination. If the trustees have not placed a clock in each room used for examination purposes the Presiding Officer shall have power to hire the use of one for each room during the time required for the examination, and charge the same as part of the expenses of the examination.

(4) The Presiding Officer shall, if there is sufficient accommodation and if sufficient papers have been received, admit candidates who through some oversight did not send their applications to the inspector. The names of such candidates are to be entered in the Supplementary List, (Form No. 181), specially provided, with such information as is required of the other candidates. This list and the required part of the fee with one dollar additional as provided, should be sent by the Presiding officer to the Education Department. The remainder of the fee should be sent to the Board that bears the expense of the examination.

(5) The Presiding Officer shall exercise necessary vigilance at all times while the candidates are engaged, and he *shall not give his attention to any work other than that which pertains to his duties as Presiding Officer*. He shall take all necessary care to render it impossible for the instructions to candidates to be violated without his knowledge. This instruction (5) is to be observed however small may be the number of candidates.

(6) It is imperative that the regulations be enforced by the Presiding Officer and strictly observed by the candidates. In particular the examination papers shall be distributed, and the answer papers collected *punctually* at the time indicated in the time-table. The Presiding Officer has no authority to deviate from the official time-table.

(7) (a) In the examination room, candidates, whether writing on the same subject or on different subjects, shall be seated at least five feet apart. All diagrams or maps having reference to the subject of examination shall be removed from the room, and books, papers, etc., removed from the desks; all arrangements shall be completed, and the necessary stationery distributed at least *fifteen minutes* before the time appointed for the commencement of the first subject of the examination, and at last *five minutes* before each other subject is begun.

(b) The necessary stationery includes pens, blotting-paper, black ink of a uniform color, and the authorized examination answer books. Each candidate will receive one examination-book, at the beginning of each examination period and other books as required during said period. No

paper other than the examination-book must be distributed to the candidates, and no paper, examination-book or other book must be brought into the room by any candidate. (The Presiding Officer's attention is called especially to the instructions as to the use of the examination-books on the first page thereof).

(8) No person except the Presiding Officers and any necessary attendants shall be present with the candidates in any room at the examination; and at least one Presiding Officer shall be present during the whole time of the examination in each room occupied by the candidates. A Presiding Officer shall not have in his charge at one time more than twenty-five candidates.

(9) The Presiding Officer shall, as indicated on the time-table, read to the candidates their duties drawing attention to any feature of them that may require special care during the examination, and emphasizing the directions to the candidates as to the manner in which the slips are to be attached to the envelopes. *Great care should be taken in distributing the proper number and kind of envelopes* and examination books and in accounting for such envelopes and examination-books as have been distributed.

(10) *Punctually* at the time appointed for the commencement of each examination, the Presiding Officer shall, in the examination room and in the presence of the candidates and other assistant Presiding Officers (if any), break the seal of the envelopes containing the examination papers, and give them to the assistant officers and to the candidates. The papers of only the subject or subjects required shall be opened at one time. Until the examination in the subject is over no examination papers, other than those which the candidates receive, shall be taken out of the room.

(11) *Punctually* at the expiration of the time allowed, the Presiding Officer shall direct the candidates to stop writing, and cause them to hand in their answer papers *immediately*, duly fastened in the envelopes.

(12) The Presiding Officer shall keep upon his desk the tally-list (check-list of candidates and subjects) and as each paper in any subject is handed in (and he should carefully note the superscription of the envelope—the subject and the candidate's name) he shall check the same by entering the figure "1" opposite the name of the candidate. The Presiding Officer will enter the names of the candidates on the tally-list *in the same order as found on the list of candidates*, (Form 44). After the papers are handed to the Presiding Officer he shall not allow the envelopes to be opened, and he shall be responsible for their safe keeping until transmitted to the Education Department. The answer-envelopes as well as the question-envelopes should be kept in a safe, or in a room with the windows fastened and doors securely locked by a cylinder lock.

(13) For special instructions regarding the examinations in Stenography, Biology, etc., see the circular which is forwarded to each Presiding Officer prior to the examination.

. INSTRUCTIONS TO CANDIDATES.

(To be read to candidates as indicated on time-table.)

(1) Each candidate shall satisfy the Presiding Officer as to his personal identity before the commencement of the first day's examination and any person detected in attempting to personate a candidate shall be reported to the Department. The Presiding Officer is authorized to refuse the application of any candidate who presents himself at any cer're other than

that nearest his usual place of residence, unless the candidate's explanation of his course in so presenting himself is in every way satisfactory to the Presiding Officer.

(2) Candidates shall be in their allotted places before the hour appointed for the commencement of the examination. If a candidate be not present till after the appointed time, he shall not be allowed any additional time. No candidate shall be permitted, on any pretence whatever, to enter the room after the expiration of an hour from the commencement of the examination. The Presiding Officer is authorized to refuse admission even within the hour if the candidate's explanation is in any sense unsatisfactory, or if he has reason to suspect collusion between the newly-admitted candidate and the other candidates.

(3) A candidate shall not leave the room within *one hour* after the distribution of the examination papers in any subject; and if he then leave he shall not be permitted to return during the examination on such subject.

(4) Every candidate shall conduct himself in strict accordance with the instructions. Should he violate the instructions to be found in sections 5 and 6 below or on the first page of the examination books; should he take into the room or have in his possession, in his desk, or on his person, any book, notes, paper, or anything from which he may derive assistance; should he talk, whisper, or make signs to another candidate; should he leave his answers so exposed that any candidate may copy from him; should he give or receive aid or extraneous assistance of any kind whatsoever, his examination will be cancelled and he will be debarred from presenting himself at any Departmental examinations for two years. Should the Presiding Officer obtain clear evidence of the violation of these instructions at the time of its occurrence he shall cause the candidate concerned at once to leave the room; he shall strike his name from the list of candidates; and he shall not permit him to return to the room during the remaining part of the examination. If, however, the evidence be not complete at the time, or be obtained after the close of the examination, the Presiding Officer shall report the case to the Department.

(5) Every candidate shall write the name of the subject of examination very distinctly at the top of each page of his examination book. If he write his name or any distinguishing mark on his examination-book, or if he tear any paper from this book, or if he insert in this book any matter not pertinent to the examination, or if he use any paper or book or ink other than that provided, his examination may be cancelled.

(6) The candidate shall write his answers and full solutions on the ruled sides of the leaves of his examination-book or books (if more than one be needed, he may use the unruled sides in preparing the answers in rough. He shall fold his examination book (or books) once across, place it in the envelope provided by the Department, seal the envelope, write on the outside of the envelope the subject of examination only, and on the slip provided, his name in full (surname preceding) and then securely fasten the slip to the envelope, as instructed by the Presiding Officer. Candidates should see that their answers are placed in the proper envelopes. Scholarships and Honour Matriculation Candidates should designate their answers "Pass" or "Honour" according to the papers taken.

(7) Candidates for the Junior or Senior Teachers' Examination who take extra matriculation papers for the purpose of matriculation standing should place their answers in matriculation envelopes and the Presiding Officer shall enter their names (if this has not already been done) on the

matriculation Tally List. Parts A and B of the Matriculation History and Experimental Science papers are to be put in separate envelopes.

Candidates are also reminded that the Presiding Officer is not allowed to make *any explanation* or other statement regarding the probable meaning of any question or to *give any advice* as to what question should be answered by the candidates or how any question should be answered.

(8) Should any error appear to have been made in any question *no attention* shall be drawn to it during the time of examination by either the Presiding Officer or any of the candidates. Candidates may, however, at the end of the examination period submit the matter to the Presiding Officer who, if he considers it necessary, will report on the matter to the Department at the close of the examination.

REPORTS, ETC.

(1) The Presiding Officer shall report to the Education Department at the close of the examination in the "remarks" column of the Diagram Blank, any particulars in which the instructions, etc., were not observed and he shall mention any facts regarding the examination that he deems expedient to have brought before the Board of Examiners. The Presiding Officer and his assistants shall sign a declaration that in all other respects the instructions and regulations were fully complied with.

(2) The Presiding Officer as part of his report to the Department shall send a diagram of each room on the forms provided, showing the position occupied by each candidate and Assistant Presiding Officer during each examination. Candidates shall not be permitted to change positions.

(3) *The Presiding Officer shall not arrange the answer papers according to subjects, but shall arrange them so that all the answers of each candidate for examination shall be sent all-together and in the order in which their names appear on the list of candidates for the Examination (Form 44). To facilitate this elastic bands have been supplied, one for each candidate's set of answers.*

(4) The prompt return of the answers to the Education Department at the close of the respective examination is essential and may be greatly facilitated if the answers are sorted at the close of each day's examination. All diagrams and reports (*except the tally-list*) should be forwarded to the Department *by post* on the respective days that the answers are forwarded. The tally-list of each examination should be returned in its respective bag with the candidate's answer envelopes.

(5) The answers of the candidates taking the (a) the District Certificate Examination and (b) the Commercial Specialists' Examination, together with the corresponding tall-lists shall be returned, *in separate parcels*, securely tied, at the close of those examinations, in one of the bags provided.

(6) The answers of the candidates for (a) the Part II. Junior Teachers', (b) Junior Matriculation and (c) the Senior Teachers', (d) the Honor Matriculation Examinations, together with the corresponding tally-lists shall be returned *in separate parcels*, securely tied, at the close of those examinations, in one of the bags provided.

(7) *The answers of Scholarship candidates, (Pass or Honors) shall be enclosed in the envelopes specially provided (red) shall be made up in a separate parcel and shall be returned to the Department in the same bag as the Matriculation and Teachers' answers papers.*

(8) (a) Each bag shall be so folded and tied that the words "The property of the Education Department" will be outwards. The shipping tag should be securely attached to the strap on each bag.

(b) All the express charges must be prepaid, and no commercial value should be placed upon the bags and contents.

(c) All surplus examination papers may be given at the close of the examination to the principal of the School.

EXPENSES OF THE EXAMINATION.

The Treasurer of the High School Board or the Public School Board of the school where the examination is held shall pay on the certificate of the Public School Inspector, all the expenses of the examination which shall include the following :—

(1) For preparing the list of candidates, the inspector shall be entitled to the remuneration of \$2.00, providing that the number of the candidates writing does not exceed twenty. For each additional twenty candidates or fraction of that number the Inspector shall be entitled to an additional dollar. It is to be understood that the number of applications received, and not the examination on which the candidates write, will determine the amount paid for this service.

(2) For conducting the examination each Presiding Officer and each assistant presiding officer shall be entitled to \$4.00 a day and actual travelling expenses which shall include railway fare or the ordinary cost of conveyance.

(3) For meeting the incidental expenses of the examination, the cost of stationery, etc., and the payment for any additional services required during the examination.

GENERAL INSTRUCTIONS TO APPLICANTS AND INSPECTORS.

FEES.

District Certificate Examination \$5. Part II. Junior Teachers' \$5. Junior Matriculation Examination \$5. Senior Teachers' Examination Part I and II each \$3; taken together \$5. Commercial Specialist Examination, \$5. For candidates for examination in the additional subjects (not to exceed four) for matriculation into any university or learned profession, the fee shall be \$2. For more than 4 subjects \$5. Honor or scholarship matriculation \$5. If the fees for a candidate amount to more than \$5, only \$5 will be required.

Attention is directed to the scale of fees to be paid by candidates. When the fee is \$5, \$3, or \$2, the amount to be sent to the Department is \$3, \$2, or \$1 respectively. The remainder of the fees received is to be forwarded to the High School Board or other body that bears the expense of the examination.

Applications will not be received by the Inspector after the 24th day of May, and candidates are reminded that they should in no case forward their applications to the Education Department. If the candidate should, through an oversight, neglect to have his application duly sent to the Inspector, he may present himself at the examination, when the Presiding Officer is at liberty to admit him, provided there is the necessary accommodation, and that a sufficient number of examination papers has been forwarded. An additional fee of \$1 will be exacted by the Presiding Officer from a candidate who presents himself in this way.

Toronto, November, 1904.

II. ORDERS-IN-COUNCIL.

1. Mr. Wm. Casey appointed Gardener and Assistant Engineer of the London Normal School. Approved 6th January, 1904.
2. Regulations respecting Manual Training and Household Science. Approved 23rd March, 1904.
3. Abolition of Art School examinations after this year, except those for Teachers' certificates including such as are required for Specialists. Approved 15th April, 1904.
4. Order-in-Council of 7th October, 1903, amended so as to continue the appointments of Teachers of Manual Training for another year after the 1st day of September, 1904. Approved 22nd April, 1904.
5. Section 51 of the Regulations of Education Department amended by striking out the word "Ontario" in the third line and substituting therefor the word "Canada." Approved 31st May, 1904.
6. Certificates (9) to teach Household Science in the Public and High Schools granted. Approved 15th June, 1904.
7. Regulations regarding free text-books. Approved 30th June, 1904.
8. Mr. J. S. Mercer granted an interim certificate qualifying him to teach in a High School or Collegiate Institute. Approved 13th July, 1904.
9. Regulations authorizing text-books. Approved 23rd July, 1904.
10. High School established in the Village of Chesley. Approved 10th August, 1904.
11. High School established in the Village of Plantagenet. Approved 10th August, 1904.
12. High School established in the Town of Mildand. Approved 10th August, 1904.
13. Revised Regulations of the Education Department bearing date August, 1904. Approved 17th August, 1904.
14. Miss Mary H. Merritt transferred from the teaching staff of the Ottawa Model School to the Toronto Model School, and Miss Evelyn Helen Weir appointed to the Ottawa School. Approved 16th September, 1904.
15. Latin Grammar, by E. W. Hagarty, added to list of text-books authorized 23rd July, 1904. Approved 30th September, 1904.
16. Miss Clara Burgoyne granted a certificate to teach Household Science. Approved 30th September, 1904.
17. Miss J. Stocks appointed Assistant Librarian, Education Department, appointment to take effect 1st November, 1904. Approved 7th October, 1904.
18. Miss Meta M. D. McBeth appointed pianist to the Toronto Normal and Model Schools. Approved 17th October, 1904.
19. Miss Jennie Hilliard appointed Teacher in the Ottawa Model School. Approved 26th October, 1904.
20. Certificates (2) to teach Household Science granted. Approved 2nd November, 1904.
21. Toronto Technical School made a Technical High School to date from 1st September, 1904. Approved 2nd November, 1904.
22. Appointments to the Educational Council made. Approved 2nd November, 1904.
23. The Ontario Institution for the Deaf and Dumb at Belleville, and the Ontario Institution for the Blind at Brantford, transferred from the Provincial Secretary's Department to the Education Department. Approved 23rd November, 1904.

24. Berlin High School raised to the rank of a Collegiate Institute, said status to take effect from 1st September, 1904. Approved 30th November, 1904.

25. Book entitled "The Principles and Practice of Oral Reading," authorized in the High Schools and Continuation Classes. Approved 8th December, 1904.

26. Mr. H. R. Alley appointed Librarian of Education Department. Approved 9th December, 1904.

27. Miss A. H. Baker appointed Assistant Kindergarten teacher at the Ottawa Model School, appointment to take effect 1st November, 1904. Approved 16th December, 1904.

28. Second Class Professional Certificate issued to Miss M. L. Gertrude Hagar in 1882, cancelled in 1884, re-issued to her. Approved 16th December, 1904.

29. Certificates (11) to teach Manual Training granted. Approved 16th December, 1904.

30. "Rose's Public School Geography" authorized for use in the Public Schools. Approved 23rd December, 1904.

31. The following books authorized for use in the schools:—For Public Schools—A Canadian History by Weaver. The Story of the Canadian People, by Duncan. For High Schools and Continuation Classes—The Commercial Course in Practical Bookkeeping and Business Forms, by Dickenson and Young. Approved, 23rd December, 1904.

32. Certificates (3) to teach Household Science granted. Approved 23rd December, 1904.

33. High School established in the village of Rockland. Approved 30th December, 1904.

APPENDIX I.—TECHNICAL EDUCATION—PUBLIC AND FREE LIBRARIES, ART SCHOOLS, LITERARY AND SCIENTIFIC INSTITUTIONS, ETC.

Report of S. P. May, M.D., C.L.H., Superintendent of Public Libraries, Art Schools, Etc.

Sir, I have the honor to submit herewith my report on the Public and Free Libraries, Art Schools and Scientific Institutions receiving a share of the Legislative Grant, in the Province of Ontario for the year ending 31st December, 1903. Prior to payment of Grants I visited and inspected the following Public Libraries, Scientific Institutions, etc :—

Aberarder, Acton, Alton, Aurora, Baden, Barrie, (1) Belleville, Bracebridge, Bradford, Brampton, Caistorville, Caledon, Callander, Camden East, Campbellford, Cardinal, Chepstow, Clifford, Comber, Cornwall, Don, Dundalk, Dunnville, East Toronto, Flesherton, Fonthill, Forest, Fort Erie, Gananoque, Garden Island, Georgetown, Glen Cross, Gravenhurst, (2) Guelph, Hamilton P.L., Hamilton Art School, Hamilton Scientific Association, Hanover, Harrowsmith, Iroquois, Keswick, Kingston, Komoka, Leamington, Lefroy, London, Lucan, Madoc, Mildmay, Mono Road, Morrisburgh, Napanee, Newburgh, New Hamburg, Orangeville, Orillia, (3) Ottawa P.L., Ottawa Field Naturalists' Club, Ottawa L'Institut Canadien Francais, Ottawa Literary and Scientific Society, Ottawa St. Patrick's Association, Ottawa University Scientific Society, Perth, Port Hope, Priceville, Rockwood, Ridgetown, Shakespeare, (4) Smith's Falls, Smithville, Sterling, Stratford, Strathcona, Strathroy, St. Thomas P.L., St. Thomas

Art School, Sydenham, Toronto Junction, Trenton, Vandorf, Vankleek Hill, Wales, Walkerton, Welland, Weston, Wheatley, Winchester, Wolfe Island, (5) Woodstock, Yarker.

(1) Belleville Public Library is now Free ; circulation of books increased about five times and Reading Room very popular.

Sir Gilbert Parker donates \$100.00 per annum to this Library.

(2) Guelph. A new building is in course of erection. Carnegie grant \$20,000. The building has a very fine appearance; it is built with artificial stone and stone foundation on a prominent site in the City Park.

(3) Ottawa has a Free Library in course of erection. Carnegie grant \$100,000. The site cost over \$20,000. The building is Indiana Lime Stone, with stone foundation ; it is to be opened in May, 1905, and will contain the following rooms :—1st floor—delivery room, stock room, librarian's room, open shelf room, catalogue room, reading room, ladies' room, children's room, reception room, coat room, etc.; 2nd floor—Upper part of stock room, museum, ladies' room, board room, lecture hall, newspaper room, two study rooms, and society or association room. This library will be a great boon to the citizens of Ottawa, it being erected in a prominent central position is certain to be well patronized.

(4) Smith's Falls. Their new library is now open ; cost of building \$11,000 (Carnegie grant). Messrs. Frost Bros. contributes \$600 per annum. The Town Council paid for site, furniture, etc.

(5) Woodstock Public Library is now Free and very successful, notwithstanding loss from fire, etc. The number of readers has increased 150 per cent.

It is very gratifying to state that the result of my inspections the past few years is very satisfactory. I have always recommended that Libraries should be made free, and that the municipal councils should contribute to the maintenance of the Libraries, which are for the benefit of their own people, and especially for the educational advantages to young people ; giving them access to books relating to their intended life work, in fact a kind of post graduate education.

The following lists show that Ontario had 128 Free Libraries which received municipal grants in 1903, and 167 Libraries (not free) received municipal aid in 1903:—

Free Libraries—Acton, Ailsa Craig, Arnprior, Athens, Aylmer, Ayr, Beeton, Belleville, Berlin, Bothwell, Bracebridge, Brampton, Brantford, Bighton, Brockville, Brussels, Burk's Falls, Caistorville, Caledonia, Camden East, Cardinal, Carleton Place, Cayuga, Chatham, Chesley, Cherterville, Clifford, Clinton, Collingwood, Copleston, Cornwall, Creemore, Deseronto, Delhi, Don, Drayton, Dutton, Erin, Exeter, Fordwich, Forest, Galt, Garden Island, Georgetown, Glencoe, Goderich, Grand Valley, Grantham, Gravenhurst, Grimsby, Guelph, Hagersville, Hamilton, Hespler, Holyrood, Ingersoll, Iroquois, Kemptville, Kingsville, Lakefield, Lanark, Lancaster, Leamington, Lindsay, Listowel, Little Current, London, Lucknow, Markdale, Merrickville, Merritton, Midland, Millbrook, Milverton, Mitchell, Niagara Falls South, North Augusta, North Bay, Orangeville, Oshawa, Otterville, Paisley, Palmerston, Parkhill, Parry Sound, Pembroke, Penetanguishene, Picton, Port Carling, Port Colborne, Port Rowan, Prescott, Preston, Renfrew, Richmond Hill, Ridgeway, Sarnia, Sault Ste. Marie, Seaforth, Shelburne, Simcoe, Smith's Falls, Stayner, Stouffville, Stratford, Streetsville, St. Catharines, St. Marys, St. Thomas, Sundridge, Tamworth, Tara, Thessalon, Thornhill, Thorold, Toronto, Trenton, Uxbridge, Wallaceburg, Waterford, Waterloo,

Watford, Westford, Wiarton, Windsor, Wingham, Wroxeter, Wyoming, 128.

The following libraries (not free) received municipal grants in 1903:

Abingdon, Admaston, Alma, Almonte, Amherstburg, Ancaster, Angus, Arthur, Atwood, Auburn, Baden, Barrie, Beachville, Beamsville, Beaverton, Belfountain, Belwood, Bervia, Blenheim, Bobcaygeon, Bolton, Bowmanville, Bracondale, Bradford, Bridgeburgh, Brigden, Brooklyn, Brucefield Bunyan, Burlington, Callendar, Cambray, Campbellford, Canfield, Cannington, Cargill, Carp, Chepstow, Claremont, Cobourg, Cold Springs, Coldwater, Comber, Dresden, Dundalk, Dundas, Dungannon, Dunnville, Durham, Elmwood, Elora, Embro, Emsdale, Ennotville, Essex, Ethel, Fencelon Falls, Fergus, Fonthill, Fort Erie, Fort Francis, Gananoque, Glamis, Glen Allen, Glen Cross, Glenmorris, Gorrie, Haliburton, Harrow, Hensall, Hepworth, Highgate, Huntsville, Inwood, Kincardine, Kingston, Kinmount, Kirkfield, Lion's Head, Little Britain, Lorne Park, Lucan, Lynden, Manilla, Manitowaning, Maple, Marksville, Meaford, Melbourne, Mildmay, Minden, Molesworth, Monkton, Morrisburgh, Mount Brydges, Mount Forest, Napanee, Newbury, New Hamburg, New Dundee, Newmarket, Niagara, Niagara Falls, Norland, Norwich, Norwood, Oakville, Oakwood, Omeme, Orillia, Pakenham, Paris, Perth, Petrolia, Pickering, Pinkerton, Point Edward, Port Arthur, Port Credit, Port Dover, Port Elgin, Port Perry, Rat Portage, Ridgetown, Ripley, Riversdale, Rodney, Romney, Rosseau, Saltfleet, Smithville, Southampton, Springfield, Strathroy, St. George, St. Helen's, Sunderland, Sunnidale, Sydenham, Teeswater, Thamesford, Thamesville, Thornbury, Tilbury, Tilbury East, Tilsonburg, Tiverton, Toronto Junction, Underwood, Unionville, Victoria, Walkerton, Walton, Wardsville, Warkworth, Waterdown, Welland, West Lorne, Weston, Wheatley, Whitby, Williamstown, Woodstock, Wardsville, Yarker, York, Zephyr.

248 Public Libraries (not free) were paid grants for 1903.

131 Public Libraries (free) were paid grants for 1903.

52 Libraries did not report for 1903, as follows:—

Algonquin, Bancroft, Battersea, Belmont, Binbrook, Bognor, Brougham, Burritt's Rapids, Chapleau, Colborne, Cold Springs, Copper Cliff, Dawson, Duart, Dundella, Elgin, Finch, Flesherton, Floradale, Forks of the Credit, Freelon, Gore Bay, Hastings, Hillsburg, Holland Centre, Kars, Kearney, King, Kintore, Linwood, Maitland, Metcalfe, Mono Centre, Mono Mills, Moose Creek, Morewood, Munster, Nairn Centre, Oil Springs, Ophir, Pelee Island, Powassan, Primrose, Queensville, Rosemount, Thornton, Trout Creek, Tweed, Vars, Violet Hill, Wesport, Winchester.

I was successful in re-organizing three Libraries during the year, but the following Libraries, including some that never reported after incorporation, are taken off the list of Libraries entitled to grants for 1904:—Cache Bay, Courtright, Farran's Point, Grantley, Horning's Mills, Jerseyville, Orrville, Osnabruck Centre, Singhampton, Winchester Springs, 10.

Niagara Falls and Niagara Falls South Public Libraries have amalgamated, and the new Library is called the City of Niagara Falls Public Library.

The following Libraries were incorporated during the year:—

Ayton, Cockburn Island, Depot Harbor, Hawkesbury.

The following table shows the locality of every Public and Free Library in the Province on the 1st December, 1904.

FREE AND PUBLIC LIBRARIES.

Counties and Districts.	Cities, Towns and Villages.	Counties and Districts.	Cities, Towns and Villages.
Addington	Camden, East.	Carleton.....	Metcalfe.
"	Enterprise.	"	Munster.
"	Napanee Mills (Strathcona P.O.)	"	North Gower.
"	Newburgh.	"	Richmond.
"	Tamworth.	Dufferin	Glen Cross.
"	Yarker.	"	Grand Valley.
Algoma	Bruce Mines.	"	Honeywood.
"	Chapleau.	"	Melanethon.
"	Coulais Bay.	"	Mono Centre.
"	Marksville.	"	Orangeville.
"	Nairn Centre.	"	Primrose.
"	Ophir.	"	Rosemont.
"	Port Arthur.	"	Shelburne.
"	Rat Portage.	"	Violet Hill.
"	Sault Ste. Marie.	Dundas	Chesterville.
"	Schrieber.	"	Dundela.
"	Thessalon.	"	Inkerman.
"	Victoria Mines.	"	Iroquois.
"	Webbwood.	"	Matilda (Iroquois P.O.)
Brant	Brantford.	"	Morewood.
"	Burford.	"	Morrisburg.
"	Glenmorris.	"	Winchester.
"	New Durham.	Durham	Bowmanville.
"	Paris.	"	Millbrook.
"	Scotland.	"	Orono.
"	St. George.	"	Port Hope.
Bruce	Bervie.	Elgin	Aylmer.
"	Cargill.	"	Bayham.
"	Chepstow.	"	Dutton.
"	Chesley.	"	Port Burwell.
"	Elmwood.	"	Port Stanley.
"	Glamis.	"	Rodney.
"	Hepworth.	"	St. Thomas.
"	Holyrood.	"	Shedden.
"	Kincardine.	"	Sparta.
"	Lion's Head.	"	Springfield.
"	Lucknow.	"	Vienna.
"	Mildmay.	"	West Lorne.
"	Paisley.	Essex	Amherstburg.
"	Pinkerton.	"	Comber.
"	Port Elgin.	"	Essex.
"	Ripley.	"	Harrow.
"	Riversdale.	"	Kingsville.
"	Southampton.	"	Leamington.
"	Teeswater.	"	Pelee Island.
"	Tara.	"	Windsor.
"	Tiverton.	Frontenac	Battersea.
"	Underwood.	"	Garden Island.
"	Walkerton.	"	Harrowsmith.
"	Westwood.	"	Kingston.
"	Warton.	"	Mississippi.
Carleton	Carp.	"	Sydenham.
"	Dawson.	"	Wolfe Island.
"	Kars.	Glengarry	Lancaster.
"	Kinburn.	"	Maxville.
"	Manotick.	"	Williamstown.

FREE AND PUBLIC LIBRARIES.—Continued.

Counties and Districts.	Cities, Towns and Villages.	Counties and Districts.	Cities, Towns and Villages.
Grenville	Algonquin.	Huron	Auburn.
"	Burritt's Rapids.	"	Brucefield.
"	Cardinal.	"	Blyth.
"	Easton's Corners.	"	Brussels.
"	Jasper.	"	Clinton.
"	Kemptville.	"	Dungannon.
"	Maitland.	"	Ethel.
"	Merrickville.	"	Exeter.
"	North Augusta.	"	Fordwich.
"	Oxford Mills.	"	Goderich.
"	Prescott.	"	Gorrie.
"	Spencerville.	"	Hensall.
Grey	Ayton.	"	Molesworth.
"	Badjeros.	"	Seaforth.
"	Bognor.	"	St. Helen's.
"	Chatsworth.	"	Walton.
"	Clarksburg.	"	Wingham.
"	Dromore.	"	Wroxeter.
"	Durham.	Kent	Blenheim.
"	Dundalk.	"	Bothwell.
"	Flesherton.	"	Chatham.
"	Holland Centre.	"	Dresden.
"	Holstein.	"	Duart.
"	Kemble.	"	Highgate.
"	Hanover.	"	Tilbury.
"	Lake Charles.	"	Tilbury E. (Valetta P.O.)
"	Markdale.	"	Ridgetown.
"	Meaford.	"	Romney.
"	Maxwell and Feversham.	"	Thamesville.
"	Owen Sound.	"	Wallaceburg.
"	Priceville.	"	Wheatley.
"	Shallow Lake.	Lambton	Arkona.
"	Thornbury.	"	Aberarder.
Haliburton	Haliburton.	"	Alvinston.
"	Minden.	"	Brigden.
Haldimand	Caledonia.	"	Bunyan.
"	Canfield.	"	Copleston.
"	Cayuga.	"	Forest.
"	Cheapside.	"	Inwood.
"	Dufferin (Clanbrassil P.O.)	"	Oil Springs.
"	Dunnville.	"	Petrolia.
"	Hagersville.	"	Point Edward.
"	Jarvis.	"	Sarnia.
"	Nanticoke.	"	Thedford.
"	Victoria (Caledonia P.O.)	"	Watford.
"	York.	"	Wyoming.
Halton	Acton.	Lanark	Allan's Mills.
"	Burlington.	"	Almonte.
"	Georgetown.	"	Carleton Place.
"	Milton.	"	Dalhousie.
"	Oakville.	"	Elphin.
Hastings	Bancroft.	"	Lanark.
"	Belleville.	"	Maberley.
"	Deseronto.	"	Middleville.
"	Madoc.	"	Pakenham.
"	Marlbank.	"	Perth.
"	Stirling.	"	Poland.
"	Trenton.	"	Smith's Falls.
"	Tweed.	"	Watson's Corners.

FREE AND PUBLIC LIBRARIES.—Continued.

Counties and Districts.	Cities, Towns and Villages.	Counties and Districts.	Cities, Towns and Villages.
Leeds	Addison.	Ontario	Beaverton.
"	Athens.	"	Brooklin.
"	Brookville.	"	Brougham.
"	Elgin.	"	Cannington.
"	Gananoque.	"	Claremont.
"	Mallorytown.	"	Oshawa.
"	Newboro'.	"	Pickering.
"	Westport.	"	Port Perry.
Lennox	Odessa.	"	Sunderland.
"	Napanee.	"	Uxbridge.
Lincoln	Livingdon.	"	Whitby.
"	Beamsville.	"	Zephyr.
"	Caistorville.	Oxford	Beachville.
"	St. Catharines (St. Catharines P.O.)	"	Drumbo.
"	Merritton.	"	Embro.
"	Grimsby.	"	Harrington.
"	Niagara.	"	Ingersoll.
"	Smithville.	"	Kintore.
"	St. Catharines.	"	Plattsville.
Manitoulin	Cockburn Island.	"	Norwich.
"	Gore Bay.	"	Otterville.
"	Little Current.	"	Princeton.
"	Manitowaning.	"	Tavistock.
Middlesex	Alisa Craig.	"	Tillsonburg.
"	Belmont.	"	Thamesford.
"	Coldstream.	"	Woodstock.
"	Dorchester.	Parry Sound	Burk's Falls.
"	Glencoe.	"	Callender.
"	Komoka.	"	Depot Harbor.
"	London.	"	Emsdale.
"	Lucan.	"	Kearney.
"	Melbourne.	"	Parry Sound.
"	Mt. Brydges.	"	Pawaasan.
"	Newbury.	"	Rosseau.
"	Parkhill.	"	South River.
"	Strathroy.	"	Sprucedale.
"	Wardsville.	"	Sundridge.
Muskoka	Bracebridge.	"	Trout Creek.
"	Baysville.	Peel	Alton.
"	Gravenhurst.	"	Belfountain.
"	Huntsville.	"	Bolton.
"	Port Carling.	"	Brampton.
"	Severn Bridge.	"	Caledon.
Nipissing	Copper Cliff.	"	Cheltenham.
"	Halleybury.	"	Claude.
"	North Bay.	"	Forks of the Credit.
"	Thornloe.	"	Inglewood.
Norfolk	Bloomsburg.	"	Lorne Park.
"	Delhi.	"	Mono Road.
"	Port Dover.	"	Mono Mills.
"	Port Rowan.	"	Port Credit.
"	Simcoe.	"	Streetsville.
"	Waterford.	Perth	Atwood.
Northumberl'd.	Brighton.	"	Listowel.
"	Campbellford.	"	Milverton.
"	Cobourg.	"	Monkton.
"	Cold Springs.	"	Mitchell.
"	Colborne.	"	Shakespeare.
"	Fenella.	"	St. Mary's.
"	Gore's Landing.	"	Stratford.
"	Warkworth.		

FREE AND PUBLIC LIBRARIES.—*Continued.*

Counties and Districts.	Cities, Towns and Villages.	Counties and Districts.	Cities, Towns and Villages.
Peterborough ...	Hastings.	Waterloo	Ayr.
"	Havelock.	"	Baden.
"	Lakefield.	"	Berlin.
"	Norwood.	"	Elmira.
"	Peterborough.	"	Florasdale.
Prescott	Hawkesbury.	"	Galt.
"	Vankleek Hill.	"	Hawkesville.
Prince Edward	Bloomfield.	"	Hespeler.
"	Pictou.	"	Linwood.
Rainy River ...	Dryden.	"	New Dundee.
"	Fort Frances.	"	New Hamburg.
Renfrew	Admaston.	"	Preston.
"	Arnprior.	"	Waterloo.
"	Burnstown.	"	Wellesley.
"	Cobden.	Welland	Bridgeburg.
"	Douglas.	"	Fonthill.
"	Forester's Falls.	"	Fort Erie.
"	Pembroke.	"	Niagara Falls.
"	Renfrew.	"	Niagara Falls South.
"	White Lake.	"	Port Colborne.
Russell	Russell.	"	Ridgeway.
"	Vars.	"	Thorold.
Stormont	Avonmore.	"	Welland.
"	Berwick.	"	Alma.
"	Cornwall.	"	Arthur.
"	Crysler.	"	Belwood.
"	Finch.	Wellington	Clifford.
"	Moose Creek.	"	Drayton.
"	Newington.	"	Elora.
"	Wales.	"	Erin.
Simcoe	Alliston.	"	Ennotville.
"	Angus.	"	Fergus.
"	Barrie.	"	Glen Allan.
"	Beeton.	"	Guelph.
"	Bradford.	"	Harriston.
"	Coldwater.	"	Hillsburg.
"	Collingwood.	"	Morrison.
"	Cookstown.	"	Mount Forest.
"	Creemore.	"	Palmerston.
"	Elmvale.	"	Bookwood.
"	Hillsdale.	Wentworth	Ancaster.
"	Lefroy.	"	Binbrook.
"	Midland.	"	Dundas.
"	Orillia.	"	Freelton.
"	Penetanguishene.	"	Hamilton.
"	Stayner.	"	Mill Grove.
"	Sunnidale (New Lowell P.O.)	"	Lynden.
"	Thornton.	"	Saltfleet (Stony Creek P.O.)
"	Tottenham.	"	Waterdown.
Victoria	Bobcaygeon.	York	Aurora.
"	Cambray.	"	Bracondale.
"	Fenelon Falls.	"	Don.
"	Kinmount.	"	East Toronto.
"	Kirkfield.	"	Highland Creek.
"	Little Britain.	"	Islington.
"	Lindsay.	"	Keswick.
"	Manilla.	"	King.
"	Norland.	"	Maple.
"	Oakwood.	"	Markham.
"	Omeme.	"	Mount Albert.
"	Woodville.	"	Newmarket.

FREE AND PUBLIC LIBRARIES.—*Concluded.*

Counties and Districts.	Cities, Towns and Villages.	Counties and Districts.	Cities, Towns and Villages.
York	Queensville.	York	Toronto.
"	Richmond Hill.	"	Toronto Junction.
"	Scarboro'.	"	Unionville.
"	Stouffville.	"	Vandorf.
"	Thornhill.	"	Weston.
		"	Woodbridge.

The above list may be classified as follows:—

Public Libraries reporting	288
Free Libraries reporting	140
Public Libraries not reporting	46
Free Libraries not reporting	6

Public Libraries incorporated since 31st December, 1903	4
Totals	484

I. PUBLIC LIBRARIES (NOT FREE).

The following extracts are taken from the annual reports for the year ending 31st December, 1903. (For details see table A).

1. Classification of Public Libraries Reporting.

Public Libraries with reading rooms	94
Public libraries without reading rooms	194
Total	288

2.—Public Libraries—Receipts and Balances on Hand.

The total receipts of 288 Public Libraries was	\$75,376.23
Balances on hand	5,197.23

3. Public Libraries—Expenditure.

The total expenditure of 288 Public Libraries was \$70,179 00

4. Public Libraries—Assets and Liabilities.

Assets of 288 Public Libraries	\$424,500 78
Liabilities of 288 Public Libraries	16,339 45

5. Number of Members in Public Libraries.

288 Public Libraries have 36,480 members.

6. No. of Volumes in Public Libraries and No. of Volumes Issued.

Number of volumes in 288 Libraries	536,325
Number of volumes issued in 288 Libraries	818,312

7. Reading Rooms in Public Libraries.

94 Public Libraries reporting have reading rooms.

21 Libraries reported having periodicals for circulation.

115 Libraries subscribed for 2,222 newspapers and periodicals.

TABLE A—Receipts, Expenditures, Assets and Liabilities of Public Libraries (not Free) for the year ending 31st December, 1903.

No.	Public Libraries.	Receipts.					Total receipts.		Expenditure.		Balance on hand.	Number of members.	Number of volumes in library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.		Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balance and other sources.													
1	Aberarder.	64 20		70 00	52 96	217 16	206 18	10 98	175	3,182	1,944	22	1,648 00	150 00				
2	Abingdon.	113 30	10 00	5 25	6 21	134 76	124 21	10 55	109	261	527		169 85	80 00				
3	Addison.	33 00	10 00	13 80	22 34	78 84	80 10	48 74	136	1,219	1,014		550 00					
4	Addison.	140 00		44 80	69 66	254 46	111 50	142 96	119	414	1,086		308 00					
5	Alma.	87 40	23 00	16 75	48 83	170 68	164 40	6 28	143	1,114	2,851	16	1,040 55					
6	Allan's Mills.	17 50		12 25	9 09	38 84	36 48	2 36	126	506	415		354 37					
7	Alliston.	40 90		62 00		102 90	102 90		117	2,024	2,896		1,546 23	81 51				
8	Almon.	167 70	150 00	115 00	10 92	443 62	443 62		137	3,601	4,580	21	3,814 65					
9	Amherstburg.	167 80	150 00	84 32	138 82	541 94	467 98		123	3,144	3,572	20	5,179 00					
10	Ancaster.	52 50	25 00	29 60	30 60	137 70	126 98		78	681	1,001		512 40					
11	Angus.	15 50	20 00	19 20	27 56	82 26	82 07	19	107	592	494	10	384 22					
12	Arkw.	158 00		35 00	42 46	235 46	238 64	1 82	110	2,322	3,538	15	1,200 00					
13	Arthur.	119 00	200 00	101 25	134 66	554 91	553 02	1 89	167	2,774	3,309	27	2,120 00					
14	Atwood.	90 20	15 00	41 25	234 64	381 09	369 82	11 27	250	1,753	6,610		1,514 68	166 25				
15	Auburn.	64 60	25 00	33 50	120 51	243 61	235 76	7 85	100	1,186	1,663	12	802 83	110 00				
16	Aurora.	80 90		80 45	212 87	374 22	370 26	3 96	100	3,041	4,772	11	3,803 96	1,086 67				
17	Avonmore.	140 00		46 15	42 78	228 88	227 63	1 25	65	1,294	2,382	7	661 15	40 00				
18	Baden.	87 80	35 00	36 00	45 19	167 99	167 99		102	2,900	1,274		1,565 53	45 19				
19	Badjeres.	135 30		262 55	19 51	190 81	188 34		262	4,766	10,162	28	4,935 00	586 00				
20	Barrie.	175 00	150 00	25 00	373 72	625 87	657 87	24 85	104	786	709		586 64					
21	Bayham.	22 35		14 28	36 60	83 85	80 92		59	332	725		206 27					
22	Bayville.	77 10				91 88	90 92		147	899	1,599		612 06	257 90				
23	Beachville.	140 00	20 00	47 50	117 14	324 64	254 83		172	2,407	3,522	6	2,281 41					
24	Beaunville.	105 00	40 00	70 60	6 99	222 59	222 59		158	1,474	2,492	24	1,234 23	88 87				
25	Beaunton.	85 50	49 75	94 65	61 90	291 80	279 49	12 31	161	2,062	1,481		1,050 00	7 00				
26	Belfountain.	139 44	25 00	14 10	52 35	230 89	229 00	1 89	111	1,474	2,947		1,209 29	4 04				
27	Belwood.	88 60	25 00	21 60	15 24	150 44	160 41		100	1,654	2,707		826 48	61 95				
28	Berville.	140 00	33 00	12 80	17 33	182 83	178 85	4 48	237	907	1,065		600 00	200 00				
29	Berwick.	140 00		75 00	55 00	270 00	262 61	7 39	119	8,919	6,829	28	3,136 50	52 00				
30	Blenheim.	173 15	80 00	179 05	78 84	511 08	510 50		134	1,804	3,958	15	1,325 00	71 50				
31	Bloombury.	24 80			18 04	42 84	42 84		101	1,644	1,108		661 78	30 00				
32	Blossfield.	8 00			20 00	67 98	66 00		103	2,331	3,956		2,032 20					
33	Blyth.	65 85		28 80	34 65	129 10	128 80		100	2,399	4,136	15	1,517 25					
34	Bobcaygeon.	18 00	50 00	67 00	30 50	285 50	254 72	32 40	164	3,447	2,037	68	3,760 01	99 56				
35	Bolton.	84 00	50 00	75 00	82 00	245 90	244 72	1 18	122	1,447	2,290		1,742 92	121 40				
36	Bowman's Hill.	103 00	100 00	136 00	103 09	442 14	400 62	6 92	164	2,290	3,447		1,742 92	121 40				
37	Bracondale.	127 25	20 00	50 40	26 52	204 27	202 46	1 81	164	1,447	2,290		1,742 92	121 40				
38	Bradford.	41 60	20 00	50 40	26 52	204 27	202 46	1 81	164	1,447	2,290		1,742 92	121 40				
39	Bridgwater.	46 00	20 00	42 25	21 15	209 15	169 41	19 06	111	1,164	3,447		1,742 92	121 40				

10	Brigden	118 90	30 00	48 53	64 50	261 98	257 62	4 36	153	722	3,272	426 43
41	Brooklin	126 50	50 00	34 25	31 77	243 52	205 91	36 61	108	2,107	2,575	1,225 00
42	Brucefield	126 90	25 00	35 00	9 29	168 19	161 98	6 51	108	783	1,729	501 34
43	Bruce Mines	122 10	5 00	40 00	187 87	355 97	953 97		117	722	1,244	615 68
44	Buryan	135 00	5 00	43 55	94 08	345 05	136 86	18 71	150	517	752	354 78
45	Burford	113 30	50 00	42 00	381 81	545 83	511 40	38 98	134	2,115	2,629	1,547 70
46	Burlington	66 40	50 00	42 00	83 61	272 01	212 00		109	2,365	4,152	1,779 39
47	Burrington	46 10	15 00	11 75	304 53	318 58	165 00	23 41	109	962	1,682	310 00
48	Callander	76 90	50 00	13 75	304 53	318 58	165 00	23 41	109	962	1,682	310 00
49	Cambury	104 40	130 00	10 65	26 75	331 83	318 58	165 00	117	934	2,311	650 14
50	Campbellford	137 60	10 00	10 90	81 11	331 83	318 58	165 00	109	4,241	4,156	2,325 00
51	Canfield	137 60	10 00	58 30	109 10	433 66	251 67	8 73	156	722	1,470	464 00
52	Canington	140 00	25 00	57 30	109 10	433 66	251 67	8 73	110	2,900	4,105	1,882 07
53	Cargill	69 60	25 00	43 70	13 70	151 41	150 55	1 75	100	1,982	3,089	1,463 85
54	Carp	35 10	57 90	12 50	42 95	268 52	197 60	12 41	108	2,648	5,253	1,790 97
55	Chatsworth	140 00	10 00	55 00	17 25	334 95	217 35	8 54	107	1,512	914	1,785 54
56	Cheapside	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
57	Cheltenham	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
58	Chepstow	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
59	Clarendon	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
60	Clarksburg	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
61	Claude	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
62	Colbour	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
63	Coldstream	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
64	Coldwater	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
65	Comber	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
66	Cookstown	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
67	Crysler	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
68	Dorchester	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
69	Douglas	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
70	Dresden	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
71	Dromore	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
72	Drumbo	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
73	Dryden	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
74	Duffern (Clanbrassil P. O.)	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
75	Dundalk	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
76	Dundas	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
77	Dungannon	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
78	Dunville	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
79	Durham	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
80	Easton's Corners	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
81	East Toronto	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
82	Elmira	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
83	Elmvale	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
84	Elmwood	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
85	Elora	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
86	Elphinstone	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
87	Embro	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
88	Ensdale	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
89	Ennville	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
90	Essex	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
91	Ethel	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
92	Fennell	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
93	Fenelon Falls	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
94	Fergus	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
95	Fonthill	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
96	Forester's Falls	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
97	Fort Erie	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32
98	Fort Frances	112 00	40 00	55 00	17 25	334 95	217 35	8 54	108	2,583	1,048	1,079 32

TABLE A.—Receipts, Expenditure, Assets and Liabilities, etc.—Continued.

No.	Public Libraries.	Receipts.				Expenditure.	Balance on hand.	Number of members.	Number of Volumes in library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balances and other sources.	Total receipts.							
99	Gananoque.....	140 55	250 00	277 00	47 16	714 81	657 33	222	3,323	10,822	20	2,579 58	87 50
100	Glenora.....	140 00	40 00	14 15	74 32	268 47	268 47	150	1,860	1,860		924 27	
101	Glen Allan.....	70 90	10 00	15 75	21 06	117 71	103 71	105	1,164	866		923 27	
102	Glen Cross.....		15 00	18 80	21 40	55 20	54 19	105	99	61		50 43	
103	Glen Morris.....	98 75	32 14	32 14	200 07	200 92	188 45	104	2,465	1,055	17	1,969 50	
104	Gore's Landing.....	70 30	50 00	33 80	128 00	231 60	221 00	119	981	1,035		1,880 50	
105	Gore's Landing.....	32 50	15 00			47 50	32 40	91	1,972	1,197		1,583 50	
106	Goulds Bay.....			48 50	171 66	220 16	217 16	100	208	731	1	177 16	171 66
107	Halleybury.....	40 40		15 16	60 16	60 16	60 16	101	414	790		211 52	
108	Haliburton.....	79 00	25 00	25 50	18 96	148 45	100 58	102	753	1,578		357 00	4 45
109	Hanover.....	61 00		80 80	10 60	102 46	84 01	168	857	2,785		620 97	84 19
110	Harrington.....		50 00	27 50	18 16	45 66	45 66	60	845	8,082		405 00	17 54
111	Harrow.....	24 60		59 70	90 48	224 78	224 06	124	1,070	2,532	12	537 70	1 35
112	Harrowsmith.....	116 82		52 00		168 82	124 39	104	809	1,806		250 89	
113	Hawlock.....			105 00	283 06	388 06	392 06	78	426	1,278		298 78	298 78
114	Hawkesville.....	2 50		8 55	24 27	35 32	25 25	80	819	1,278		380 46	
115	Hensall.....	135 80	40 00	58 85	299 05	446 50	446 50	143	1,516	3,208		1,204 35	206 84
116	Hepworth.....	33 55	15 00	12 60	1 00	62 15	60 55	105	1,011	1,725		1,305 00	50 00
117	Highgate.....	140 00	25 00	29 78	24 62	219 37	216 16	173	1,627	8,584		1,248 00	
118	Highland Creek.....	42 80		26 00	84 29	84 29	83 88	116	1,474	1,020		1,248 00	
119	Hillsdale.....	140 00		84 35	15 20	249 55	249 55	107	655	1,824		380 00	8 35
120	Holstein.....	137 10		80 00	10 00	177 10	177 10	104	782	1,231		526 00	50 00
121	Honeywood.....	56 25	150 00	27 00	6 86	90 11	90 08	104	347	1,322	21	2,065 00	49 65
122	Huntsville.....			74 25	59 65	468 90	458 90	119	3,021	7,378		1,385 00	10 90
123	Inglewood.....	18 00		21 00	35 42	56 42	56 42	106	1,779	3,080		91 96	
124	Inkerman.....			4 50	2 99	7 49	7 49	107	182	17		253 35	
125	Inwood.....	107 40	10 00	41 40	107 72	266 52	214 45	102	401	1,294		8 50	
126	Jalington.....	69 90		48 00	6 84	124 84	124 75	166	1,626	2,014	11	1,050 00	175 00
127	Jarvis.....	113 50		75 00	99 50	288 09	266 83	108	2,956	2,857	20	1,403 00	
128	Jasper.....	140 00		40 00	30 00	210 00	205 28	112	607	1,337		695 60	
129	Kenzie.....	47 35		18 95	166 80	233 10	227 66	110	1,004	1,215		183 71	61 23
130	Keewick.....	119 60		8 00		122 60	122 60	110	218	1,005		1,025 00	
131	Kinburn.....	140 00		10 20	95	151 15	149 90	88	1,722	722		2,725 00	245 00
132	Kincardine.....	170 40	820 00	99 80	50 14	640 34	628 48	182	4,552	9,071	27	6,300 00	194 20
133	Kingsport.....	176 00	400 00	265 00	28 99	868 99	849 75	250	7,299	16,801	57	1,164 07	132 80
134	Kirkland.....	128 25	50 00	38 60	58 49	271 24	271 24	104	1,840	2,648	1	1,164 07	
135	Kirkland.....	128 25	50 00	38 60	58 49	271 24	271 24	104	1,840	2,648	1	1,164 07	
136	Komoka.....	144 00		144 00	1 50	289 50	289 50	116	1,267	3,134		1,162 80	

TABLE A.—Receipts, Expenditures, Assets and Liabilities, etc.—Continued.

No.	Public Libraries.	Receipts.				Expenditure.	Balance on hand.	Number of members.	Number of volumes in library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balances and other sources.	Total receipts.							
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.					\$ c.	\$ c.
196	Pakenham	19 25	15 00	13 15	48 55	100 95	100 77	106	569	973		411 80	20 00
197	Paris	120 20	150 00	516 81	91 71	516 81	516 81	108	7,087	3,747	35	11,232 60	1 42
198	Perth	102 40	150 00	19 00	16	271 56	271 56	116	4,159	2,883		2,021 00	280 00
199	Peterborough	214 75		447 15	809 82	971 72	971 72	345	10,065	14,312	99	11,955 83	120 00
200	Petrolia	140 00	50 00	98 00	70 24	356 24	343 27	136	919	3,201		1,676 52	142 42
201	Pickering	47 15	40 00	41 15	65 96	194 26	144 59	146	1,636	3,063	21	1,275 80	25 00
202	Pinkerton	140 00	30 00	26 00	22 22	218 22	217 25	105	1,605	1,543		1,125 82	189 11
203	Plattsville	20 80		32 58	55 11	108 49	104 81	100	1,109	1,781		618 69	
204	Point Edward	140 00	50 00	85 50	55 04	311 54	304 78	117	2,899	2,891		3,925 29	
205	Poland	140 00		20 00	60 00	220 00	220 00	100	554	660		454 81	234 81
206	Port Arthur	200 00	339 10	88 50	58 20	680 80	524 42	137	2,140	3,684	22	3,908 56	
207	Port Burwell	140 00		49 75	74 10	263 85	237 61	100	857	1,159		493 61	101 12
208	Port Credit	182 40	20 00	32 50	45 50	180 40	176 78	108	1,684	1,746		1,063 26	
209	Port Dover	125 95	35 00	63 75	92 05	316 75		103	940	1,366	21	1,025 00	
210	Port Elgin	67 50	20 00	31 50	5 20	124 20	108 90	126	3,127	3,347		1,959 42	
211	Port Hope	175 00		326 15	399 08	900 23	762 68	195	4,430	6,938	42	4,874 86	213 63
212	Port Perry	118 20	65 00	100 00	40 26	318 46	298 93	167	2,221	3,940	22	1,675 00	150 00
213	Port Stanley	51 75		89 30	5 16	96 21	96 06	105	1,212	1,397		980 00	
214	Priceville			47 25	193 84	240 59	230 44	116	244	96		207 79	167 79
215	Princeton	140 00		42 70	96 67	279 37	279 87	107	1,880	3,181		1,230 00	74 11
216	Rat Portage	175 00	300 00	163 70	638 94	1,276 94	1,276 94	117	2,860	14,208	26	2,384 76	625 95
217	Richmond	72 10		41 50	18 57	127 17	123 62	108	1,430	1,826		1,060 90	
218	Ridgeway	140 90	35 00	127 25	74 96	378 11	355 23	201	3,815	4,443	80	4,600 00	
219	Ripley	139 80	50 00	61 80	34 10	285 20	264 44	139	1,727	3,819		1,401 68	
220	Riversdale	23 80	25 00	8 00	15 12	71 92	60 07	126	928	1,468	1	658 28	
221	Rockwood	92 60		48 00	38 99	174 59	145 13	104	1,521	2,246	13	570 40	40 26
222	Rodney	97 15	10 00	20 75	71 30	208 20	204 13	126	1,125	1,708		1,084 68	30 60
223	Romney	105 50	40 00	29 40	12 69	187 59	187 59	79	2,460	1,547		1,894 99	23 28
224	Rosseau	13 65	15 00	72 27	20 92	72 27	58 00	401	648	1,111		246 00	
225	Russell	152 70		49 85	193 73	396 27	349 87	129	1,648	2,762	27	2,649 06	210 00
226	Saltfleet (Stoney Creek P. O.)	140 00	50 00	25 50	35 30	250 80	228 55	102	969	1,840		727 00	
227	Scarboro	140 00		73 96		214 08	174 83	142	6,541	3,667		8,928 00	
228	Schreiber	46 40		247 20	1,269 10	1,561 70	899 06	150	1,017	3,679	14	2,811 51	300 00
229	Scotland	160 25		36 00	118 87	248 12	230 74	100	1,294	2,396	29	3,077 34	
230	Shakamunga	19 00		19 00	169 78	318 78	314 73	114	977	1,408		307 83	95 38
231	Shakamunga	19 00		19 00	169 78	318 78	314 73	114	977	1,408		307 83	95 38
232	Shallow Lake	67 85		27 25	7 02	112 02	4 42	128	1,891	3,543		1,177 47	165 84
233	Shedden	72 63		60 00	126 88	258 48	6 82	108	1,881	1,060		697 82	71 47
234	Smithville	140 00	25 00	60 00	48 80	203 80	223 10	146	816	2,076		879 79	183 14

235	Southampton	63 50	20 00	62 90	143 95	270 36	215 40	54 95	137	4,503	2,812	3,340 00
236	Sparta	103 20	20 00	42 80	105 59	251 29	251 29	32 89	102	960	2,562	1,175 42
237	Spencerville	66 80	20 00	26 00	21 07	113 87	90 33	32 89	115	2,358	1,825 96	300 00
238	Springfield	49 35	50 00	16 95	24 86	90 33	208 31	6 50	230	620	1,057	32 81
239	Springdale	102 90	50 00	16 95	44 96	214 81	208 31	6 50	64	1,777	1,441 50	200 00
240	Strucsdale	160 00	50 00	10 35	40 68	211 03	208 31	6 50	110	1,081	700 00	100 00
241	Stirling	175 00	75 00	197 00	165 43	392 43	338 85	23 88	115	1,587	329 83	150 43
242	Strathroy	175 00	75 00	163 50	329 73	748 23	338 85	23 88	286	19,894	5,600 00	150 43
243	St. George	116 05	50 00	49 80	145 83	361 80	360 25	1 55	103	6,083	5,461 28	150 43
244	St. Helen's	92 25	15 00	19 99	145 83	361 80	360 25	1 55	107	5,170	2,419	16
245	Sunderland	102 98	55 00	13 00	80 67	209 49	222 51	56 54	118	1,700	1,859	53 60
246	Sunnisdale (New Lowell P. O.)	94 60	15 00	11 80	2 72	279 05	222 51	56 54	118	1,825	1,166	53 60
247	Sydenham	142 25	25 00	142 25	204 25	279 05	222 51	56 54	72	770	1,211	467 04
248	Tavistock	175 00	50 00	66 25	266 30	627 55	445 00	87 28	145	261	12	132 49
249	Teeswater	110 05	50 00	56 76	220 81	487 65	398 39	49 26	117	3,317	2,781	185 51
250	Thamesford	55 00	20 00	52 80	50 16	160 27	179 69	17 69	168	3,823	4,069	2,250 00
251	Thamesville	146 00	150 00	115 50	166 19	577 69	530 22	47 47	158	1,804	2,792	1,326 43
252	Theford	110 50	27 28	52 00	27 28	189 78	150 22	31 76	125	3,568	3,710	232 85
253	Thornbury	40 00	25 00	18 60	55 62	139 22	139 22	31 76	104	2,083	4,538	1,115 00
254	Thornloe (New Lis-keard P.O.)	94 85	76 00	53 10	32 05	180 00	180 00	31 76	138	1,242	2,354	480 00
255	Tilbury	115 40	76 00	54 55	93 51	338 46	338 46	31 76	106	662	2,266	570 00
256	Tilbury E. (Valetta P. O.)	115 40	76 00	54 55	93 51	338 46	338 46	31 76	106	1,985	2,859	1,438 28
257	Tillsonburg	115 30	100 00	74 85	21 12	120 47	113 34	7 13	106	1,682	588	910 00
258	Tiverton	69 50	20 00	29 00	121 07	239 57	235 46	1 85	120	2,799	5,421	18
259	Toronto Junction	130 10	300 00	146 50	79 80	676 41	537 97	138 42	60	1,910	2,960	1,000 00
260	Underwood	54 95	30 00	28 00	57 40	170 35	169 67	68 42	186	8,483	6,385	2,700 00
261	Unionville	23 10	30 00	18 87	33 70	105 67	81 72	23 96	151	2,588	2,842	1,176 18
262	Vandorf	20 30	30 00	45 50	45 51	111 31	104 61	6 70	108	605	2,103	415 00
263	Vankleek Hill	140 00	70 00	60 30	58 36	258 66	258 66	6 70	91	2,215	961	1,801 31
264	Victoria (Carlake P.O.)	70 00	10 00	13 00	27 15	120 15	120 08	07	126	1,123	2,495	885 00
265	Victoria Mines	59 65	11 00	29 20	29 20	99 85	99 85	07	104	2,487	1,734	1,769 00
266	Vienna	140 00	28 00	46 75	23 38	220 13	210 13	07	112	369	893	163 13
267	Wales	171 50	20 00	99 10	28 08	321 68	287 22	34 46	134	1,227	2,832	829 96
268	Walkerton	180 10	25 00	35 95	320 38	312 97	312 97	7 41	120	3,259	5,949	1,970 69
269	Walton	35 90	30 00	18 33	65 84	145 07	130 46	14 61	106	1,126	1,925	10
270	Wardsville	62 60	35 00	50 05	225 07	372 72	372 72	65	103	1,394	1,981	509 00
271	Warkworth	85 00	5 00	116 59	257 39	247 94	247 94	9 45	110	1,127	761	700 00
272	Watford	140 00	100 00	32 30	16 80	189 10	189 10	9 45	160	2,208	8,061	181 29
273	Watson's Corners	140 00	100 00	12 00	69 06	221 06	221 06	9 45	116	346	79	996 00
274	Webbwood	140 00	100 00	79 65	125 82	384 72	329 28	56 46	126	471	603	205 00
275	Welland	134 35	100 00	32 00	65 00	292 17	292 17	56 46	132	8,921	5,233	500 00
276	Wellsey	67 70	10 00	8 50	3 21	76 20	65 90	24 90	140	1,489	3,011	1,019 54
277	West Lorne	106 50	60 44	91 75	48 64	221 65	221 07	58	228	1,148	1,585	907 64
278	Weston	52 90	80 00	76 95	106 73	273 29	249 98	23 81	117	3,262	3,877	2,350 00
279	Whitby	78 80	75 00	56 00	23 74	208 54	200 60	20 12	112	1,641	3,826	28 91
280	Williamstown	93 80	35 00	60 32	224 02	216 28	216 28	7 94	103	3,184	6,450	1,125 00
281	Wolfe Island	61 75	150 00	396 25	48 58	715 08	715 08	49 75	185	1,511	1,797	2,070 00
282	Woodbridge	175 00	75 00	56 65	23 97	230 27	230 27	42 14	82	337	1,709	20 00
283	Woodstock	74 65	80 00	45 10	22 61	276 71	234 57	42 14	110	1,878	1,200	1,709 86
284	Woodville	139 00	20 00	149 09	188 36	187 77	187 77	49	278	13,679	38	38 00
285	York	105 80	24 87	12 50	22 36 94	75,376 23	70,179 00	5,197 23	112	2,391	2,694	150 00
286	Zeplyt	105 80	24 87	12 50	22 36 94	75,376 23	70,179 00	5,197 23	100	522	583	105 33
287	Total	26,579 99	10,601 62	15,867 68	22,326 94	75,376 23	70,179 00	5,197 23	105	1,927	2,280	637 00
288	Total	26,579 99	10,601 62	15,867 68	22,326 94	75,376 23	70,179 00	5,197 23	126	1,374	615	704 41
	Total	26,579 99	10,601 62	15,867 68	22,326 94	75,376 23	70,179 00	5,197 23	36,480	536,225	818,312	424,500 78
	Total	26,579 99	10,601 62	15,867 68	22,326 94	75,376 23	70,179 00	5,197 23			2,222	16,339 45

II. PUBLIC LIBRARIES, FREE.

The following extracts are taken from the Annual Reports for the year ending 31st December, 1903, (for details see table B).

1. Classification of Free Libraries Reporting.

Free Libraries, with reading rooms	92
Free Libraries, without reading rooms	48
Total	140

2. Free Libraries, Receipts and Balances on Hand.

The total receipts of 140 Free Libraries was...	\$165,564 90
Balances on hand	9,245 24

3. Free Libraries, Expenditure.

The total expenditure of 140 Free Libraries was \$156,319 66

4. Free Libraries, Assets and Liabilities.

Assets of 140 Free Libraries	\$845,104 44
Liabilities of 140 Free Libraries	105,650 94

5. Number of Readers in Free Libraries.

140 Free Libraries report having had 137,460 readers.

6. No. of Volumes in Free Libraries, and No. of Volumes Issued.

Number of volumes in 140 Free Libraries	628,248
Number of volumes issued in 140 Free Libraries	1,715,916

7. Reading Rooms in Free Libraries.

92 Free Libraries reported having reading rooms.

92 Free Libraries subscribed for 3,760 newspapers and periodicals

TABLE B.—Receipts, Expenditure, Assets and Liabilities, etc., of Public Libraries (Free) for the year ending 31st December, 1903.

No.	Free Libraries.	Receipts.			Balances and other sources.	Total receipts.	Expenditure.	Balance on hand.	Number of members.	Number of volumes in library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.		Liabilities.	
		Legislative grants.	Municipal grants.	Members' fees.									\$	c.	\$	c.
1	Acton	183 50	150 00		42 10	325 60	321 13	4 47	238	2,042	3,311		2,114 40			
2	Ailsa Craig	79 60	100 00	4 60	129 67	313 87	213 80	100 07	145	2,356	3,173		2,050 00			
3	Alton	75 65		8 05	100 09	183 79	183 79		256	5,397	4,144		4,683 10			
4	Alvington	140 00			254 97	404 97	404 97		108	1,082	3,708		1,500 00		371 53	
5	Arnprior	66 35	100 00		62 94	229 29	213 53	15 74	250	2,419	4,481		1,415 74			
6	Athens		60 00	59 85	157 70	277 55	240 69	36 86	203	1,544	1,496	20	1,037 00			
7	Aymer		300 00	18 15	59 96	534 27	534 27	8 09	508	4,171	10,698	26	3,630 00			
8	Ayr		139 00	3 75	40 48	244 58	258 85	5 68	325	3,227	5,936	28	1,800 00			
9	Beeton	60 60	81 50		26 08	1,68 18	1,478 97	14 61	91	2,386	2,677	9	1,300 00		20 00	
10	Belleville	175 00	800 00		518 28	1,493 28	1,478 67		1,463	8,642	25,567	44	4,400 00		201 19	
11	Berlin	140 00	1,774 95		131 22	2,081 17	2,081 17		867	8,642	11,184	59	8,625 18			
12	Bothwell	175 00	275 00		95 29	510 29	471 34	38 95	293	2,093	4,020		1,450 00			
13	Bracebridge	175 00	314 11	31 67	368 78	912 56	876 60	85 96	388	2,814	7,398	24	1,906 33			
14	Brampton	171 40	475 00		32 78	699 18	685 15	14 03	411	4,322	12,726	22	2,850 00			
15	Brantford	175 00	2,700 00	4 00	270 80	3,149 80	3,114 96	34 84	2,229	18,916	69,854	117	16,200 00			
16	Brighton	171 80	185 00		33 06	399 86	380 53	18 83	284	3,060	5,617	23	1,518 83		195 39	
17	Brockville	175 00	1,100 00	20 25	291 87	1,587 12	1,489 44	97 68	2,588	10,245	42,575	55	6,200 00			
18	Brussels	140 00	171 00		70 60	381 60	381 60		263	3,065	4,757	23	1,700 00			
19	Burk's Falls	156 20	180 00		32 78	368 98	335 59	33 39	371	2,421	4,377	20	1,634 90			
20	Caistorville	4 03	5 00		4 60	13 63	10 00	3 63	120	379	1,166		297 75		10 00	
21	Caletton	140 00	90 00		95 59	235 59	235 59		123	3,390	5,637		2,658 32		91 25	
22	Caledonia	140 00	65 00		5 21	235 41	231 41	3 80	217	1,673	1,596		1,596 79			
23	Camden East	77 10	173 00	1 00	35 63	168 73	168 73		221	1,798	1,664	16	1,016 17		137 62	
24	Cardinal	24 70	300 00	2 00	183 11	384 81	297 73	87 08	251	4,837	2,495	25	1,170 00			
25	Carleton Place	171 50	64 00	18 30	317 75	789 25	798 27	280 98	470	4,348	12,395	18	3,050 00			
26	Cayuga	47 40	64 00		40 46	170 16	167 16	3 00	101	1,768	1,488		1,075 00			
27	Chatham	175 00	1,200 41		640 51	2,065 51	2,016 17	39 34	800	6,314	18,642	40	25,139 34		600 00	
28	Chesley	112 70	280 41	14 50	34 98	412 59	347 47	65 12	338	1,923	7,818	24	885 00			
29	Chesterville	140 00	60 00		282 80	472 80	472 80		327	1,486	2,130		1,270 29			
30	Clifford	108 50	160 00	12 90	6 62	223 02	223 02	189 99	210	3,645	6,539	40	885 00			
31	Clinton	175 00	165 00		459 78	799 78	682 80		607	4,665	11,696	38	13,565 53			
32	Cobden	108 20		15 60	92 57	216 37	216 37	117 48	115	696	2,296		518 58		2 86	
33	Collingwood	96 00	948 77		9,929 85	10,574 72	10,574 72		115	696	2,296		518 58		2 86	
34	Copplestone	140 00	20 00	9 90	19 00	188 90	141 05	47 85	964	5,102	13,871	46	20,508 31			
35	Cornwall	175 00	500 00		555 17	1,250 17	1,250 17		111	1,352	1,468		850 00			
36	Cremona	51 75	25 00		13 89	90 64	80 18	10 46	716	3,485	12,644	39	2,500 00		753 44	
37	Dalhousie (McDonald's Corner, P.O.)	60 00			11 83	71 83	70 90	93	101	771	562		470 00			

TABLE B.—Receipts, Expenditure, Assets and Liabilities (Free) for the year ending 31st December, 1903.

No.	Public Libraries.	Receipts.					Expenditure.	Balance on hand.	Number of members.	Number of volumes in Library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balances and other sources.	Total receipts.								
		£	£	£	£	£	£	£	c.	£	£	£	£	£
38	Deeronto	175 00	600 00	11	154 11	959 11	876 61	92 50	959	4,175	36,025	44	2,439 90	46 50
39	Delhi	99 90	150 00	11	55 16	305 06	264 97	40 09	255	1,710	8,839	28	1,276 94	
40	Don		25 00	53	20 53	45 53	45 15		64	1,095	711 97		711 97	
41	Drayton	171 90	150 00		223 58	545 48	497 52	47 96	278	8,241	8,617	19	2,400 00	800 00
42	Dutton	133 90	50 00	21 76	53	208 19	128 60	77 59	200	1,791	2,412		1,397 81	72 41
43	Enterprise				216 53	216 53	215 21	1 32	188	908	576		642 11	100 00
44	Erin	53 60	35 00	2 50	6 64	97 74	91 19	6 55	151	1,976	3,560		1,406 54	
45	Exeter	175 00	167 86	30 00	49 08	421 89	371 14	50 75	524	4,488	10,283	22	2,539 00	
46	Fordwich	115 50	15 00	18 40	60 00	208 90	196 23	12 67	228	1,866	1,974		1,200 00	125 67
47	Forest	130 45	350 00		69 51	549 96	472 70	77 26	535	8,852	8,908	19	3,262 26	50 80
48	Galt	175 00	1,446 00	50 00	106 93	1,726 93	1,600 66	126 27	1,866	5,653	25,385	63	7,500 00	
49	Garden Island	137 20	175 00		644 67	1,044 67	851 94	76 92	135	5,764	1,664	32	8,483 53	
50	Georgetown	137 20	200 00	12 75	91 66	428 86	317 83		305	2,864	7,654		2,800 00	
51	Gloucester	112 10	50 00		144 98	317 83	317 83		265	2,508	8,740		1,210 00	138 83
52	Goderich	164 65	215 00		243 79	613 44	509 00	104 44	550	4,303	9,725	84	1,700 00	90 88
53	Grand Valley	112 40	35 00		105 18	302 58	302 58		192	2,195	2,698	14	1,559 86	
54	Grantham (St. Catharines P. O.)	140 00	100 00		116 56	356 56	356 08	48	225	2,202	2,319		1,479 00	2 50
55	Gravenhurst	140 00	100 00		139 20	379 20	379 20		523	2,595	6,037		1,854 20	118 86
56	Grimaby	134 10	385 00		64 67	523 77	521 07	2 70	750	4,469	16,243	29	3,700 00	13 52
57	Guelp	175 00	1,690 00		101 60	1,966 60	1,966 60		1,268	1,569	56,456	50	11,700 00	
58	Hagersville	129 10	135 00	85 50	6 16	345 76	334 84	11 42	337	2,066	5,202	16	1,524 11	
59	Hamilton	175 00	13,350 00		1,078 47	14,603 47	14,696 05	7 42	13,890	24,905	99,737	186	70,164 67	28,729 49
60	Harrison	75 50		7 00	249 79	331 79	323 76	8 08	451	4,327	4,849	29	2,775 00	
61	Hespeler	166 10	200 00		140 95	509 05	420 43	88 62	415	8,470	7,646	29	2,760 00	
62	Holyrood	72 80	30 00		50 67	153 47	144 42	9 06	105	2,151	4,509		1,925 69	31 16
63	Ingersoll	151 90	565 00		48 60	765 50	708 71	61 79	825	5,132	17,179	28	2,100 00	17 93
64	Ingersoll	76 00	150 00		113 71	339 71	315 42	24 29	234	2,060	6,223	27	2,044 04	160 00
65	Kemptville	168 60	248 35		232 14	650 78	552 39	98 34	886	1,471	7,880	21	1,294 45	183 95
66	Kingville	168 75	200 00		232 14	620 89	481 83	139 06	190	1,769	4,249	22	1,519 06	50 00
67	Lakeland	77 20	100 00	2 50	23 19	202 89	179 12	23 77	120	1,228	2,185		625 00	
68	Lanark	95 80	86 34		218 60	386 79	345 66	41 13	194	1,776	3,265		1,863 00	
69	Lancaster	135 40	40 00		2,287 68	2,473 08	2,472 92	16 16	272	8,976	2,314		4,500 00	289 50
70	Lancaster	165 10	992 27		295 63	1,453 03	1,453 03	81 30	1,547	1,977	18,977	51	4,070 40	4 00
71	Lindsay	174 80	275 00	40 65	295 63	1,453 03	1,453 03	121 06	1,547	8,221	8,846	20	1,600 00	
72	Little Current	60 00	64 25		124 25	124 25	124 25		200	8,032	21,092	14	48,500 00	20,000 00
73	London	175 00	8,000 00		1,074 81	9,249 81	9,249 81		3,000	17,629				

75	Lucknow	77 25	100 00	42 70	22 00	241 95	199 83	42 82	292	3 224	4 087	1 680 00	74 08
76	Markdale	172 80	75 00	18 60	14 76	280 66	270 69	9 97	193	2 860	3 251	2 682 02	
77	Marlbank	140 00	.....	.....	194 29	384 29	380 25	404	206	2 981	5 878	466 07	
78	Merrickville	187 10	125 00	13 60	171 15	446 85	482 87	14 48	255	2 981	5 878	2 874 48	258 30
79	Merriton	63 65	.....	.....	32 76	194 41	171 19	25 22	475	1 935	4 811	1 286 01	
80	Midland	175 00	473 51	.....	16 28	684 79	683 46	1 83	614	2 097	6 789	900 00	13 00
81	Millbrook	183 80	175 00	.....	91 53	399 83	298 56	106 27	24	2 139	8 391	1 410 00	800 00
82	Millerton	140 00	80 00	9 30	267 99	467 29	467 29	.....	214	2 208	8 260	1 686 87	100 00
83	Michell	107 00	335 00	15 15	80 74	587 89	419 91	117 96	208	3 982	8 113	4 963 48	
84	Napanee Mills, (Strath- cona P.O.)	140 00	.....	.....	46 76	186 76	186 76	.....	180	1 315	560	710 00	
85	Newington	106 80	.....	29 00	194 76	380 00	380 00	.....	100	647	366	1 893 81	221 26
86	Niagara Falls, South	52 10	50 00	3 00	27 19	127 59	124 05	3 51	251	1 349	3 920	1 485 00	25 00
87	North Augusta	144 50	35 00	1 50	32 49	218 19	177 41	40 78	.....	2 498	3 920	1 093 79	43 75
88	North Bay	71 70	125 00	.....	45 98	242 63	242 63	.....	122	1 683	4 109	1 963 37	11 72
89	Orangeville	175 00	400 00	16 35	79 05	670 40	618 83	51 57	802	2 060	6 265	3 645 00	200 00
90	Oshawa	141 20	677 00	.....	850 78	1 117 52	1 117 52	51 38	565	3 694	4 265	2 050 00	150 00
91	Otterville	74 20	61 61	7 56	41 94	175 80	156 87	18 48	800	4 083	14 587	2 050 00	150 00
92	Paisley	93 75	232 00	19 90	19 30	384 92	358 32	6 83	197	866	2 214	641 97	37 10
93	Palmerston	124 50	1 205 00	7 25	45 11	1 386 91	1 274 99	61 92	250	4 232	9 302	1 784 00	521 19
94	Parkhill	174 90	60 00	164 27	170 01	161 27	161 27	6 74	389	2 137	9 302	1 206 06	
95	Parr Sound	175 00	250 00	.....	81 63	606 65	385 25	121 88	174	2 022	3 206	1 225 00	174 00
96	Pembroke	159 65	252 35	.....	102 87	854 37	754 10	100 27	560	2 110	7 332	1 150 27	99 50
97	Penetanguishene	147 60	264 98	.....	412 58	412 58	412 58	.....	884	4 986	9 623	2 838 00	
98	Pictou	175 00	700 00	9 00	930 14	930 14	930 14	.....	1 301	3 064	28 856	1 900 09	18 24
99	Port Carling	56 00	69 39	8 84	86 38	224 15	223 17	.....	185	1 560	2 112	670 00	15 00
100	Port Colborne	123 95	100 00	20 25	39 69	243 89	357 24	21 57	262	2 112	3 832	1 726 30	131 46
101	Port Colborne	123 95	100 00	20 25	39 69	243 89	357 24	21 57	262	2 112	3 832	1 726 30	131 46
102	Prescott	171 60	250 00	.....	171 81	361 36	357 24	4 12	855	5 110	12 482	6 350 00	
103	Preston	125 40	250 00	.....	171 81	361 36	357 24	4 12	855	5 110	12 482	6 350 00	
104	Renfrew	108 95	300 00	2 00	63 78	496 88	481 48	21 11	379	6 236	6 018	17 647 50	
105	Richmond Hill	88 70	100 00	6 75	39 61	474 73	435 33	39 40	263	3 756	15 162	8 459 76	89 04
106	Ridgeway	175 00	100 00	.....	66 17	240 06	233 67	6 49	123	3 115	2 796	1 960 00	
107	Sarnia	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
108	Sault Ste. Marie	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
109	Seaford	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
110	Shelburne	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
111	Simcoe	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
112	Smith's Falls	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
113	Stayner	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
114	Stouffville	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
115	Stratford	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
116	Streetsville	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
117	St. Catharines	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
118	St. Mary's	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
119	St. Thomas	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
120	Sundridge	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
121	Tamworth	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
122	Tara	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
123	Thessalon	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
124	Thornhill	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
125	Thorold	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
126	Toronto	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
127	Tottenham	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
128	Trenton	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
129	Uxbridge	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
130	Wallaceburg	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
131	Waterford	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
132	Watloo	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20
133	Watford	175 00	1316 05	122 00	12 844 41	14 380 46	12 448 96	8 54	127	1 287	2 996	20 786 29	1 694 20

TABLE B.—Receipts, Expenditure, Assets and Liabilities (Free) for the year ending 31st December, 1903.

No.	Public Libraries.	Receipts.					Expenditure.	Balance on hand.	Number of members.	Number of volumes in library.	Number of volumes issued.	Number of newspapers and periodicals.	Assets.	Liabilities.
		Legislative grants.	Municipal grants.	Members' fees.	Balances and other sources.	Total receipts.								
134	Westford	\$ 38 60	\$ 15 00	\$	\$ 22 19	\$ 75 79	\$ 74 09	\$ 1 70	140	1,423	756	.....	\$ 1,140 44	\$
135	White Lake	38 85	.....	.....	46 89	85 74	80 37	5 37	110	762	781	.....	291 33	.....
136	Winton	175 00	425 00	.....	70 81	670 81	629 83	40 98	387	3,596	4,413	21	2,800 80	.....
137	Windor .....	.....	2,956 14	.....	1,498 87	4,639 01	4,217 77	412 24	1,823	11,495	42,912	76	42,091 53	.....
138	Wingham	130 15	325 00	63 54	24 81	548 50	510 03	38 47	421	3,714	10,202	52	2,540 00	.....
139	Wrexeter	89 10	56 00	4 25	71 52	221 37	220 17	1 20	152	4,368	2,600	.....	4,251 54	.....
140	Wyoming	50 00	50 00	31 25	38 25	169 50	169 50	.....	125	1,563	2,167	.....	1,032 00	22 85
Total		17,219 23	99,586 21	1,151 29	47,578 17	165,561 90	156,319 66	9,245 24	137,460	628,248	1,715,916	3,760	\$45,101 44	105,650 91

PROPORTIONATE NUMBER OF VOLUMES IN PUBLIC LIBRARIES.

Libraries With Less Than 250 Volumes.

Bloomsburg, Glen Cross, Goulais Bay, Inkerman, Keswick, Komoka, Priceville—7.

Libraries With Over 250 and Less Than 500 Volumes.

Abingdon, Addison, Baysville, Caistorville, Callander, Chepstow, Cryslar, East Toronto, Elphin, Forester's Falls, Glamis, Haileybury, Harrow-smith, Havelock, Honeywood, Inwood, Lefroy, Lorne Park, Maberley, Matilda, Maxville, Newboro', Sydenham, Victoria Mines, Watson's Corners, Webbwood, Wolfe Island—27.

Libraries With Over 500 and Less Than 1,000 Volumes.

Allan's Mills, Ancaster, Angus, Badjeros, Bayham, Beachville, Berwick, Bridgen, Brucefield, Bruce Mines, Bunyan, Burnstown, Cambray, Canfield, Cobden, Dalhousie, Dorchester, Dromore, Dryden, Elmwood, Enterprise, Fenella, Gore's Landing, Haliburton, Hanover, Harrington, Hawkesville, Hillsdale, Holstein, Jasper, Maple, Marksville, Marlbank, Maxwell & Fover-sham, Middleville, Millgrove, Molesworth, Mount Albert, Mount Brydges, Newbury, New Durham, New Dundee, Newington, Norland, Odessa, Otter-ville, Pakenham, Petrolea, Poland, Port Burwell, Port Dover, Riversdale, Rosseau, Saltfleet, Severn Bridge, Smithville, South River, Spencerville, Stirling, Sunnidale, Thornhill, Thornloe, Unionville, Vienna, White Lake, Yarker, York—67.

Libraries With Over 1,000 and Less Than 1,500 Volumes.

Admaston, Alma, Auburn, Avonmore, Beaverton, Belwood, Bracondale, Bridgeburg, Carp, Chesterville, Clarksburg, Copleston, Creemore, Don, Douglas, Drumbo, Dufferin, Easton's Corners, Emsdale, Ethel, Fort Frances, Glen Allan, Harrow, Hepworth, Highland Creek, Kemble, Kemptville, Kirk-field, Lakefield, Lion's Head, Lyndon, Mallorytown, Manitowaning, Melanc-thon, North Augusta, Melbourne, Minden, Mississippi, Monkton, Morriston, Napanee Mills, Omemee, Orono, Oxford Mills, Plattsville, Port Stanley, Richmond, Ridgeway, Rodney, Scotland, Shallow Lake, Shedden, Spruce-dale, Sundridge, Tamworth, Thornbury, Vankleek Hill, Wales, Walton, Wardsville, Warkworth, Waterford, Wellesley, Westford, West Lorne, Zephyr—66.

Libraries With Over 1,500 and Less Than 2,000 Volumes.

Alvinston, Arthur, Athens, Atwood, Berrie, Bloomfield, Blyth, Caledonia, Camden East, Cargill, Cayuga, Cheapside, Chesley, Coldstream, Cold-water, Cookstown, Delhi, Dresden, Dungannon, Dutton, Elmvale, Erin, Fordwich, Gorrie, Hensall, Highgate, Inglewood, Islington, Kinburn, Kings-ville, Kinmount, Lanark, Leamington, Little Current, Madoc, Manotick, Merritton, North Gower, Norwich, Oakwood, Pickering, Pinkerton, Port Carling, Port Credit, Princeton, Ripley, Rockwood, Russell, Schreiber, Shakespeare, Springfield, Stayner, St. Helen's, Sunderland, Thamesford, Tilbury, Tilbury East, Tiverton, Wheatley, Williamstown, Wyoming—61.

Libraries With Over 2,000 and Less Than 2,500 Volumes.

Acton, Ailsa Craig, Alliston, Arkona, Arnprior, Beamsville, Beeton, Belfountain, Bobcaygeon, Bolton, Bothwell, Bradford, Brooklin, Burford,

Burk's Falls, Burlington, Cannington, Chatsworth, Claremont, Comber, Glenmorris, Grand Valley, Grantham, Hagersville, Holyrood, Iroquois, Lake Charles, Little Britain, Lucan, Midland, Mildmay, Millbrook, Milverton, Mono Road, Nanticoke, Newburgh, Newmarket, North Bay, Norwood, Palmerston, Parkhill, Parry Sound, Pembroke, Port Arthur, Port Colborne, Port Perry, Port Rowan, Romney, Sault Ste. Marie, Sparta, Tara, Thedford, Thessalon, Tottenham, Trenton, Vandonf, Victoria, Wallaceburg, Waterdown, Woodbridge, Woodville—61.

Libraries With Over 2,500 and Less Than 3,000 Volumes.

Arthur, Baden, Bracebridge, Cheltenham, Dunnville, Elmira, Essex, Fonthill, Fort Erie, Georgetown, Glencoe, Gravenhurst, Jarvis, Manilla, Markdale, Meaford, Merrickville, Morrisburgh, New Hamburg, Point Edward, Rat Portage, Shelburne, Streetsville, Tillsonburg, Underwood, Watford—26.

Libraries With Over 3,000 and Less Than 3,500 Volumes.

Aberarder, Amherstburg, Ayr, Aurora, Bowmanville, Brighton, Brussels, Caledon, Claude, Cornwall, Drayton, Dundalk, Ennotville, Gananoque, Hespeler, Huntsville, Lancaster, Listowel, Lucknow, Markham, Milton, Mount Forest, Picton, Port Elgin, Richmond Hill, Tavistock, Toronto Junction, Walkerton, Weston, Whitby—30.

Libraries With Over 3,500 and Less Than 4,000 Volumes.

Almonte, Blenheim, Clifford, Cobourg, Durham, Fenelon Falls, Forest, Mitchell, Oakville, Orangeville, Renfrew, Ridgetown, Teeswater, Thamesville, Welland, Wiarton, Wingham—17.

Libraries With Over 4,000 and Less Than 5,000 Volumes.

Aylmer, Barrie, Brampton, Campbellford, Cardinal, Carleton Place, Clinton, Deseronto, Exeter, Fergus, Goderich, Grimsby, Harriston, Kincardine, Lindsay, Napanee, Orillia, Oshawa, Owen Sound, Paisley, Penetanguishene, Perth, Port Hope, Sarnia, Seaforth, Smith's Falls, Southampton, Stouffville, St. Mary's, Wroxtter—30.

Libraries With Over 5,000 and Less Than 6,000 Volumes.

Alton, Belleville, Collingwood, Embro, Galt, Garden Island, Ingersoll, Niagara Falls, Prescott, Scarboro', Simcoe, St. George, Thorold, Woodstock—14.

Libraries, With Over 6,000 and Less Than 8,000 Volumes.

Chatham, Dundas, Kingston, Niagara, Paris, Preston, Stratford, Strathroy, St. Thomas, Uxbridge, Waterloo—11.

Libraries With Over 8,000 and Less Than 10,000 Volumes.

Berlin, Elora, St. Catharines—3.

Libraries With Over 10,000 and Less Than 20,000 Volumes.

Brantford, Brockville, Guelph, London, Peterborough, Windsor—6.

Library With Over 20,000 and Less Than 30,000 Volumes.

Hamilton—1.

Library With Over 100,000 Volumes.

Toronto—1.

III. ART SCHOOLS AND DEPARTMENTAL DRAWING EXAMINATIONS.

Tables C to G show the number of Certificates awarded from the commencement of this branch of the Education Department in 1882.

TABLE C.—Certificates awarded in Primary Art Courses from 1882 to 1904.

Year.	Freehand drawing	Geometry.	Perspective.	Model drawing.	Blackboard drawing.	Teachers' certificates.	Total.
1882.....	28	21	17	12	28	.....	106
1883.....	84	89	58	47	76	.....	354
1884.....	153	174	139	138	86	66	756
1885.....	214	529	301	168	198	122	1,532
1886.....	634	672	149	662	414	77	2,608
1887.....	643	1,204	428	444	122	103	2,944
1888.....	805	882	520	403	236	133	2,979
1889.....	1,002	961	394	470	494	187	3,508
1890.....	1,000	1,009	290	811	313	130	3,553
1891.....	1,085	1,569	292	746	422	164	4,278
1892.....	1,361	1,419	569	1,120	720	338	5,527
1893.....	1,769	1,277	439	876	392	220	4,973
1894.....	1,383	719	548	560	562	153	3,915
1895.....	1,813	1,429	658	1,311	991	341	6,543
1896.....	1,195	569	361	1,110	1,121	265	4,621
1897.....	716	500	212	704	516	114	2,762
1898.....	854	311	173	1,124	604	149	3,315
1899.....	1,062	465	168	1,128	1,170	160	4,153
1900.....	1,000	254	194	675	1,007	130	3,260
1901.....	1,366	87	59	695	431	29	2,577
1902.....	823	154	111	599	287	41	2,015
1903.....	1,036	248	91	774	526	38	2,713
1904.....	1,463	212	126	1,293	903	60	4,056
Total.....	21,489	14,754	6,297	15,870	11,618	3,020	73,048

TABLE D.—Certificates awarded in Advanced Art Course from 1883 to 1904.

Year.	Shading from flat.	Outline from round.	Shading from round.	Drawing from flowers.	Ornamental design.	Industrial design.	Teachers' certificates.	Total.
1883.....	5	5	12	18	.....	.....	.....	40
1884.....	16	5	12	12	.....	.....	.....	45
1885.....	33	18	35	29	.....	.....	4	119
1886.....	35	24	19	48	.....	.....	3	129
1887.....	59	27	28	26	34	.....	14	187
1888.....	22	17	39	44	20	.....	9	151
1889.....	65	36	58	24	25	.....	14	222
1890.....	62	30	76	43	22	.....	15	248
1891.....	80	52	67	66	38	.....	23	326
1892.....	24	32	53	72	37	.....	13	231
1893.....	58	54	73	62	54	.....	13	314
1894.....	31	44	58	79	68	.....	24	304
1895.....	56	52	78	58	29	.....	11	284
1896.....	60	74	103	113	.....	29	17	396
1897.....	61	47	126	95	.....	41	18	388
1898.....	67	73	169	187	.....	44	18	558
1899.....	61	69	152	160	.....	57	22	521
1900.....	80	56	82	119	.....	31	17	384
1901.....	76	37	138	82	.....	85	13	426
1902.....	35	34	74	70	.....	67	10	290
1903.....	26	30	40	49	.....	42	3	190
1904.....	10	10	27	57	.....	38	3	146
Total.....	1,022	825	1,514	1,512	327	434	264	5,898

TABLE E.—Certificates awarded in Industrial Art Course from 1885 to 1904.

Year.	Modelling in clay.	Wood carving.	Wood engraving	Litho- graphy.	Painting on china.	Total.
1885.....	14					14
1886.....	11	7				18
1887.....	8	2				10
1888.....	10	3	1	1	9	24
1889.....	7	1	3	2	6	19
1890.....	7	4		1	6	18
1891.....	5	2	1		7	15
1892.....	2	1		1	3	7
1893.....	5	2		1	3	11
1894.....	4	2		2	10	18
1895.....	5	3	2	6	18	34
1896.....	3	2		3	30	38
1897.....	5	3	1	4	17	30
1898.....	7	5		1	17	30
1899.....	9	11		2	17	42
1900.....	17	14		6	6	43
1901.....	9	12		2	8	31
1902.....	6	9		4	12	31
1903.....	5	11	1	2	5	24
1904.....	1	6		1		8
Total.....	140	103	9	39	174	465

TABLE F.—Certificates awarded in Mechanical Drawing Course from 1883 to 1904.

Year.	Advanced geometry.	Machine drawing.	Building construction.	Industrial design.	Architectural design.	Advanced perspective.	Teachers' certificates.	Total.
1883.....	2	3	1	2		3		11
1884.....	1	1	1	1		1		5
1885.....	12	32	4	25		12	4	89
1886.....	14	13	5	28		14	3	77
1887.....	6	5	12	18		6	2	49
1888.....	8	7	7	15		11	2	50
1889.....	13	23	11	20		12	3	83
1890.....	11	23	5	8		12	2	61
1891.....	3	31	8	31		28	2	103
1892.....	17	25	13	38		15	2	110
1893.....	14	33	10	47		35	10	149
1894.....	12	17	6	90		9	3	137
1895.....	5	22	9	31		12	3	82
1896.....	7	9	5		9	12	3	45
1897.....	16	13	4		6	15		54
1898.....	6	19	2		7	8		42
1899.....	25	20	5		7	18		75
1900.....	14	8	12		5	14		53
1901.....	21	18	2		14	15	1	71
1902.....	18	15	6		3	45		57
1903.....	23	10	8		7	17		65
1904.....	12	6	1		4	11		34
Total.....	260	353	137	354	62	295	40	1,501

TABLE G.—Certificates awarded for Extra Subjects from 1885 to 1904.

Year.	Drawing from the antique.	Shading from casts.	Architectural designs.	Drawing from life.	Painting from life.	Painting oil colors.	Painting water colors.	Sepia.	Monochrome.	Pastel.	Sculpture in marble.	Photogravure.	Reposse work.	Industrial design.	Pen and ink.	Machine drawing.	Engraving on copper.	Crayon portraits.	Monotypes.	Pyrography.	Total.
1885						9	7														16
1886						12	7														19
1887				7		32	9														50
1888				15	12	25	14	13	1		2		2								84
1889				2	2	16	21	3													62
1890				7	4	28	18	10	4												71
1891				2	5	29	26	3	6												73
1892				2	6	21	16	7	1									2			55
1893	11		2	5	9	35	21	7	4												94
1894	11		2	8	6	29	16	5	7					10		1					95
1895	26		6	14	4	39	24	10	1					17			1				147
1896	14			12	6	34	38	6	3	2		1		13	1	1					129
1897	19	11	1	17	6	38	42	7	8			3		22	3	4					179
1898	22	12		12	9	37	28	7	6		1	6		15	4	6					171
1899	19	14		17	2	10	22	8	1			3		31	13	5					149
1900	29	30		13	4	17	10	12	5			3		14	10	4					158
1901	25	17		9	1	11	18	14	4			4		13	16	6					142
1902	22	16		13	1	19	28	17	2					17	12	4					151
1903	28	12		22	7	13	15	8	4					13	16	6					148
1904	15	19		15	2	4	8		2					30	12	8			5	6	
Total	241	131	11	204	92	458	388	137	54	32	3	20	4	195	87	50	1	2	5	6	2,121

TABLE H.—Certificates awarded to Art Schools, 1904.—Primary Course.

Name of School.	Number of Students for examination.	Number of Certificates.						Number of teachers' certificates.
		Freehand.	Geometry.	Perspective.	Model.	Blackboard.	Total proficiency certificates.	
Hamilton Art School	70	20	3	2	17	19	61	
St. Thomas " "	20	7	2	2	4	6	21	
Toronto " "	38	14	1	2	15	12	44	1
Total	128	41	6	6	36	37	126	1

TABLE I.—Certificates awarded to Art Schools, 1904.—Advanced Course.

Name of School.	Number of Students for examination.	Number of Certificates.						Number of teachers' certificates.
		Shading from flat.	Outline from round.	Shading from round.	Drawing from flowers.	Industrial design.	Total proficiency certificates.	
Hamilton Art School	63	1	3	6	12	15	37	
St. Thomas " "	8				3	1	4	
Toronto " "	49	3	2	5	1	5	16	
Total	120	4	5	11	16	21	57	

TABLE J.—Certificates awarded to Art Schools, 1904.—Mechanical Course.

Name of School.	Number of Students for examination.	Number of Certificates.					Total proficiency certificates.
		Advanced geometry.	Machine drawing.	Building construction.	Architectural designs.	Advanced perspective.	
Hamilton Art School	39	1	3	.....	2	6	16
St. Thomas "	11	3	2	1	2	.....	8
Toronto "	2	.....	.....	.....	.....	.....	.....
Total	52	8	5	1	4	6	24

TABLE K.—Certificates awarded to Art Schools, 1904.—Industrial Art Course.

Name of School.	Number of Students for examination.	Number of Certificates.					Total proficiency certificates.
		Modelling in clay.	Wood-carving.	Engraving.	Lithography.	Painting on china.	
Hamilton Art School	2	1	.....	.....	1	.....	2
St. Thomas "	6	.....	6	.....	.....	.....	6
Toronto " .....	.....	.....	.....	.....	.....	.....	.....
Total	8	1	6	.....	1	.....	8

TABLE L.—Certificates awarded to Art Schools, 1904.—Extra Subjects.

Name of School.	Number of Students for examination	Number of Certificates.										
		Painting from life.	Painting, oil colors.	Painting, water colors.	Monochrome.	Pastel.	Drawing from life.	Pen and Ink sketches.	Shading from antique.	Shading from casts.	Industrial design.	Industrial design (elementary.)
Hamilton Art School	54	.....	1	1	.....	1	5	2	3	10	7	9
St. Thomas "	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Toronto "	59	2	.....	.....	2	3	10	10	12	9	13	.....
Total	125	2	1	3	2	4	15	12	15	19	20	9

TABLE M.—Certificates awarded to Public and High Schools, Ladies' Colleges, etc., for 1904.—Primary Course.

Name of School.	Number of students for examination.	Number of certificates.					Total proficiency certificates.	Number of teachers' certificates.
		Freeland.	Geometry.	Perspective.	Model.	Blackboard.		
Almonte High School	38	19	2	1	8	2	32	.....
Arthur "	26	13	.....	.....	9	4	26	.....
Athens "	81	32	4	16	40	38	130	11
" Model School	30	25	.....	.....	16	16	57	.....
Aurora High School	40	19	.....	.....	16	18	53	.....
Belleville, Albert College.	20	8	.....	.....	7	1	16	.....
Blyth Public School.....	10	4	2	.....	5	2	13	.....
Bradford High School	28	14	.....	.....	6	3	23	.....
Brantford Central School.	119	49	.....	.....	30	24	103	.....
" Darling St.	40	11	.....	.....	7	4	22	.....
" Victoria School	11	9	.....	.....	2	2	13	.....
Calgary, N.W.T.	1	.....	1	.....	.....	.....	1	.....
Carleton Place H. School	76	57	.....	.....	51	25	133	.....
Chatham, McKeough Sch'l	72	27	.....	.....	13	20	60	.....
" Central School.....	103	38	.....	.....	27	22	87	.....
Clinton Coll. Institute ..	35	14	2	.....	12	13	41	.....
Collingwood Coll. Institute	75	29	5	5	32	17	88	1
Cornwall High School ..	2	1	.....	.....	1	1	3	.....
Deseronto "	47	19	13	.....	10	13	55	.....
East Toronto "	26	8	9	.....	9	2	28	.....
Forest "	23	4	.....	.....	.....	5	9	.....
Hamilton, Coll. Institute	79	20	.....	.....	30	31	81	.....
" Barton St. School.	71	17	.....	.....	13	16	46	.....
" Central School	58	20	.....	.....	24	6	50	.....
" Cannon St. School ..	136	74	.....	.....	76	30	180	.....
" Caroline St. School ..	71	22	.....	.....	15	10	47	.....
" Hess St. School	104	57	.....	.....	37	24	118	.....
" King Edward School ..	57	19	.....	.....	11	9	39	.....
" Murray St. School	33	10	.....	.....	16	11	37	.....
" Pierson St. School	39	14	.....	.....	14	3	31	.....
" Queen Victoria School	114	68	25	23	46	29	181	9
" Ryerson School	176	56	29	22	62	52	221	14
" Sophia St. School	25	4	.....	.....	3	2	9	.....
" Stinson St. School	158	42	.....	.....	19	22	83	.....
" Victoria School	39	21	.....	.....	12	2	35	.....
" Wentworth St. School	61	23	.....	.....	29	18	70	.....
" West Avenue School ..	70	35	.....	.....	41	16	92	.....
Ingersoll Coll. Institute ..	1	1	.....	.....	.....	1	2	1
Markham High School	68	16	3	4	17	10	50	.....
Merrickville Public School	7	.....	2	.....	.....	.....	2	.....
Morrisburgh Coll. Inst.	59	12	3	7	16	5	43	2
Mount Forest High School	37	24	.....	.....	14	13	51	.....
Napanee Coll. Institute ..	62	.....	.....	.....	40	13	53	.....
Newmarket High School ..	54	19	3	3	11	6	42	.....
Oshawa "	43	17	.....	.....	27	7	51	.....
Owen Sound Coll. Inst.	130	64	39	17	61	47	228	13
Parkhill High School	67	32	.....	.....	24	11	67	.....
Pembroke "	26	12	.....	.....	4	2	18	.....
Perth Coll. Institute	55	34	.....	1	30	28	93	.....

TABLE M.—*Concluded.*

Name of School.	Number of students for examination.	Number of certificates.						Number of teachers' certificates.
		Freehand.	Geometry.	Perspective.	Model.	Blackboard.	Total proficiency certificates.	
Petrolea High School	27	11	2	2	11	5	31	1
Port Dover	19	12	.....	.....	9	10	31	.....
Richmond Hill "	38	8	5	.....	10	8	31	.....
Renfrew Coll. Institute	22	11	.....	.....	2	4	17	.....
Ridgetown	2	.....	1	.....	2	.....	3	.....
Sarnia	1	.....	.....	.....	.....	1	1	1
Seaforth Coll. Institute	42	26	8	5	15	9	63	1
Smith's Falls Pub. School	46	37	1	.....	23	23	83	.....
Streetsville High School	15	7	.....	.....	8	.....	15	.....
St. Thomas, Alma College	5	5	1	2	4	4	16	.....
Toronto, Jarvis St. Coll. Institute	45	21	5	.....	20	20	66	1
" Harbord St. Coll. Inst.	114	74	.....	.....	74	44	192	.....
" Loretto Abbey	50	27	5	2	55	20	79	2
" Palmerston Ave. P. S.	34	17	.....	.....	17	11	45	.....
Uxbridge High School	33	.....	5	1	.....	10	16	1
Windsor Coll. Institute	113	43	31	9	45	40	168	1
Total	3,407	1,422	206	120	1,257	85	3,870	59

TABLE N.—Certificates awarded to High Schools, Ladies' Colleges, etc., 1904.—Advanced Course.

Name of School.	Number of Students for examination.	Number of certificates.						Number of teachers' certificates.
		Shading flat.	Outline from round.	Shading from round.	Drawing from flowers.	Industrial design.	Total proficiency certificates.	
Belleville Albert College	8	.....	.....	2	1	2	5	.....
Forest High School	5	.....	.....	.....	.....	1	1	.....
Hamilton, Hess St. Public School	52	.....	.....	.....	4	.....	4	.....
" Sophia St. "	4	.....	.....	.....	1	.....	1	.....
Markham High School	17	1	.....	.....	2	.....	3	.....
Smith's Falls Public School	5	.....	.....	2	.....	.....	2	.....
St. Thomas, Alma College	3	1	2	2	3	3	11	1
Toronto, Loretto Abbey	50	2	3	6	18	4	33	.....
Windsor Collegiate Institute	17	2	.....	4	12	7	25	.....
Total	161	6	5	16	41	17	85	3

TABLE O.—Certificates awarded to High Schools, etc., 1904.—Mechanical Course.

Name of School.	Number of students for examination.	Number of Certificates.					Total proficiency certificates.
		Advanced Geometry.	Machine Drawing.	Building construction.	Architectural designs.	Advanced perspective.	
Brantford Central School.....	1	1					1
Cobourg Collegiate Institute.....	1					1	1
Markham High School.....	4	1	1			2	4
Morrisburgh Collegiate Institute.....	1					1	1
Perth Collegiate Institute.....	1						
Ridgetown Collegiate Institute.....	2	1					1
Seaforth ".....	1	1				1	2
Smith's Falls Public School.....	1						
Windsor Collegiate Institute.....	5						
Total.....	17	4	1			5	10

TABLE P.—Certificates Awarded to Ladies' Colleges, etc., 1904.
Extra Subjects.

Name of School.	Number of students for examination.	Number of Certificates.			Total.
		Painting, oil colors.	Painting, water colors.	Industrial design.	
Belleville, Albert College.....	7			1	1
St. Thomas, Alma College.....	6	2	5		7
Toronto, Loretto Abbey.....	5	1			1
Total.....	18	3	5	1	9

An Order in Council has been passed, that in future Art School Examinations by the Education Department be abolished.

TEACHERS' FULL CERTIFICATES.

The following full certificates in the Primary and Advanced Courses were awarded in 1904.

1. TEACHERS' CERTIFICATES—PRIMARY COURSE.

Name.	Address.	Name.	Address.
Males.		Females.	
Baker, David	Owen Sound	Allison, Gertrude	Toronto
Bicknell, Harry	Petrolea	Ballentine, Nettie	Hamilton
Brown, Andrew	Hamilton	Batty, Irene	Owen Sound
Chagnon, Elmer	"	Boddy, O J.	"
Chapin, Roscoe	Uxbridge	Bogart, Bessie	Toronto
Connolly, Christopher ..	Athens	Buttrum, Mary	Hamilton
Craig, James	Owen Sound	Byron, Kathleen	"
Dallyn, Reginald	Hamilton	Cadwell, Lily	Athens
Douglas, Linton	Owen Sound	Charlesworth, Beatrice ..	Hamilton
Ewens, George	"	Connell, Ida L.	St. Thomas ..
Greene, David	Athens	Danby, Edith	Athens
Hatch, S. B.	Sarnia	Defoe, Helen	Toronto
Lacasse, Edmund	Seaforth	Derosier, Martha J.	Morrisburg ..
Lancefield, Chas.	Hamilton	Every, Maude	Athens
Leslie, Percy	Owen Sound	Little, Emma	Owen Sound ..
Lighthear, Wm.	Hamilton	McAndrew, Elydia	Athens
Little, Wm.	Owen Sound	Morris, Mabel	"
McMillan, George	Athens	" Ruby	"
McNeil, George	Owen Sound	Nicholson, Nellie	Hamilton
Metcalfe, Arthur	Hamilton	Parsons, Lily	Owen Sound ..
Mills, Roy	"	Presnell, Alberta	Hamilton
Norman, Lambert	Ingersoll	Rolfson, Orville	Windsor
Parmenter, Wm.	Hamilton	Taylor, Maude	Athens
Perry, Roy	"	Trevaskis, Grace	Hamilton
Potruff, Wallace	"	Turner, Edith	"
Potts, Wm.	Owen Sound	White, Kate E.	Collingwood ..
Robertson, James	Hamilton	Wiltse, Winnie	Athens
Robinson, Wm.	"		
Scott, Allan	"		
Shearer, David	"		
Sainsby, Claude	"		
Weagant, Ross	Morrisburg		
Wills, Samuel	Owen Sound		

2. TEACHERS' CERTIFICATES—ADVANCED COURSE.

Name.	Address.	Name.	Address.
Females.		Female	
Defoe, Helen	Toronto	Procunier, May V.	St. Thomas ..
Louis, Sr. M.	"		

Examination Papers.

The total number of examination papers sent out for 1904 was as follows:

Primary Course.

Freehand	525
Geometry	1,108
Perspective	940
Model Drawing	3,176
Blackboard Drawing	3,180
	<hr/> 8,929

Advanced Course.

Shading, flat	161
Outline, round	159
Shading, round	178
Flower Drawing	250
Industrial Design	135
	<hr/> 883

Mechanical Course.

Advanced Geometry	40
Machine Drawing	43
Building Construction	3
Advanced Perspective	33
	<hr/> 119
Total	<hr/> 9,931

ART SCHOOLS.

Report for the year ending 30th April, 1904.

Only three Art Schools were in operation in 1903-4, viz.: Hamilton, St. Thomas and Toronto.

The decrease of Art Schools may be attributed to the increased interest taken in drawing in Public and High Schools, Ladies' Colleges, etc., also to the progress of technical education in the Province. It is gratifying to state that qualified teachers are now employed in a large number of High and Public Schools, Ladies' Colleges, etc., and their pupils are very successful in passing the curriculum of studies in the minor branches.

An Order-in-Council has recently been passed that in future the Education Department shall not hold Art School Examinations.

1. Hamilton Art School. Hamilton Art School has recently been re-organized with a new staff of teachers. It is proposed that this winter a curriculum of studies on technological subjects be prepared and encouraged; this has met with the approval of the Hon. Minister of Education.

Their report shows that 202 pupils attended day and evening classes; 4,387 lessons were given.

The following list shows the number of lessons taken by pupils in each subject.

Primary Course.—Freehand Drawing, 171; Practical Geometry, 152; Linear Perspective, 146; Model Drawing, 162; Blackboard Drawing, 143.

Advanced Course.—Shading from Flat, 365; Outline from Round, 324; Shading from Round, 331; Drawing from Flowers, 335; Industrial Design, 379.

Mechanical Course.—Advanced Geometry, 107; Machine Drawing, 496; Building Construction, 188; Architectural Design, 214; Advanced Perspective, 66.

Industrial Art Course.—Lithography, 46; Painting on China, 216.

Extra Subjects.—Drawing from Life, 491; Pyrography, 55.

The report shows that the students in attendance represented the following trades and professions, viz.: Artists, Cabinet Makers, Carpenters, Clerks, Draughtsmen, Lithographers, Machinists, Manufacturers, Painters, Plasterers, Plumbers, Pressers, Shoemakers, Stenographers, Students, Tailors, Teachers, Tobacconists.

The receipts, including Government Grant, were : \$4,204.12.

2. St. Thomas Art School. I recently inspected St. Thomas Art School, and am pleased to state that the officers and principal approve of changing the curriculum so as to make Art Schools more valuable by teaching technical subjects, which will be of special value in their manufacturing town.

Their report shows that they had pupils over 15 years of age who attended as follows:

Primary Course, 34 pupils.

Advanced Course, 36 pupils.

Mechanical Course, 57 pupils.

Industrial Art Course, 11 pupils.

The pupils represented the following trades and professions, viz.: Broom Makers, Clerks, Machinists, Masons, Printers, Railway Clerks, Students and Teachers.

As this School is incorporated with the St. Thomas Free Library the receipts and expenditure are given in the annual report of the Library for 1903.

3. Toronto Art School. The report of the Toronto Art School shows that Students attended classes as follows:

Primary Course.—Freehand, 20; Geometry, 12; Perspective, 15; Model Drawing, 16; Blackboard Drawing, 16.

Advanced Course.—Shading Flat, 34; Outline Round, 41; Shading Round, 40; Drawing from Flowers, 33; Industrial Design, 13.

Mechanical Course.—Advanced Geometry, 6; Machine Drawing, 2; Building Construction, 13; Architectural Design, 12; Advanced Perspective, 8.

Extra Subjects.—Painting and Drawing from Life, 64.

Their report shows that the students in attendance represented the following trades and professions, viz.: Artists, Architects, Book-keepers, Carpenters, Clerks, Designers, Draughtsmen, Engineers, Framers, Glass Stainers, Illustrators, Lithographers, Nurses, Reporters, Sign Writers, Teachers and Wood Carvers.

The receipts, as audited for the year ending 1st May, 1904, were \$2,765.75; expenditure, \$3,758.98; deficit, \$993.23.

4. *Ontario Society of Artists.*—The report from the Ontario Society of Artists shows that the following pictures were selected by the Society for the Provincial Art Gallery:

"The Coming Storm," J. W. Beatty; "The Day is Done," F. M. Bell-Smith.

The following pictures were selected by the Committee of the Civic Art Guild for the Provincial Art Gallery:

"October," W. E. Atkinson	\$200.00
"A Newfoundland Trout Stream," W. Smith	125 00
"Bretaine," G. Chavignaud.....	350 00
"Sunset Glow," F. H. Brigden.....	125 00

The Provincial Art Gallery was re-hung. 113 pictures were placed upon the walls.

The 31st Annual Exhibition was held in March. 118 paintings in oil, 93 water colors and 3 pieces of sculpture were exhibited.

The Art Exhibition at the Toronto Industrial Exhibition was given over to the Society, with a grant of \$2,000.00 from the Industrial Board of Directors. The board also purchased \$1,000.00 worth of pictures from the walls of the exhibition, which contained 162 oils, 144 water colors, 83 designs, and illustrations, and 16 sculptures.

A school of Canadian Designers has been founded by graduates and members of the Ontario Society of Artists in London, England, with the name of the "Carlton." It is very successful, and great and satisfactory results are anticipated.

The Society sent a valuable collection of pictures to Winnipeg, and a small collection to the Orillia Exhibition.

The Treasurer's report up to May, 1904, shows that the receipts were \$6,644.20; expenditure, \$5,066.14; balance on hand, \$1,578.06.

LITERARY AND SCIENTIFIC INSTITUTIONS.

1. Hamilton Scientific Association.

The report of the Hamilton Scientific Association shows that they have 213 members.

Four meetings of council and seven meetings of the general association were held during the year, at which the following papers and addresses were given:

- (1) Inaugural Address, J. M. Dickson, President.
- (2) The Birds of Ontario, O. J. Stevenson, M.A.
- (3) The Art of Glass-blowing from the earliest times, F. B. Kenrick, M.A., Ph.D.
- (4) Nationalism in Poetry and the Canadian Poets, Prof. Pelham Edgar.
- (5) Ontario North Land, W. A. Park, B.A., Ph.D.
- (6) The Manufacture of National Products, F. B. Allen, M.A., Ph.D.
- (7) Presentation of reports, election of officers, etc.

New upright cases have been procured for the museum. The museum has been kept open every Saturday afternoon during the year for the benefit of the public.

Geological Section.—This section has been very active. Col. C. C. Grant read two papers on Geological Notes. The Colonel has made the discovery of several new graptolites, which have been sent to authorities for identification and classification. A considerable number of fossil sponges have been obtained and distributed to different parts of the world. Through the good work of Col. Grant the Barton Beds in the vicinity of Hamilton have become famous for the number and variety of specimens obtained from them. About two hundred specimens have been presented and acknowledged by the British museum, and museums at Ottawa, New York and Washington.

Photographic Section.—This section has held a prosperous year. The number of members who contributed slides to the interchange sets and prints to the annual exhibition have largely increased. The section is now a member of the American Lantern Slide Interchange. Twenty-five members contributed slides from which a selection of one hundred was made, including Canadian scenery, and sent to New York. Forty-five were chosen as a set to go the rounds of the interchange. Five slides were chosen for

the European set. At intervals during the year meetings were held at which sets of slides were shown and instructive demonstrations were given, including:

- (a) Toning Development-Out paper, A. G. Alexander.
- (b) Development of under and over exposed plates, J. G. Gadsby.
- (c) Making of Lantern Slides, J. H. Land.

Improvements have been made in the dark room, including a new zinc developing table, twelve new lockers, several large developing trays and graduates.

Outing.—An enjoyable outing was held at Guelph on Victoria Day.

Annual Exhibition.—The annual print exhibition was held on the 24th 25th and 26th March, and was largely attended by the members and the public.

Astronomical Section.—This section had a busy year. Fourteen meetings were held at which papers were read. Large audiences attended all these meetings.

Their annual report was printed at a cost of about \$200.00, and circulated as usual.

Receipts, including government grant, \$648.91; expenditure, \$648.73; balance on hand, 18 cents.

2. Ottawa Literary and Scientific Society.

Ottawa Literary and Scientific Society report shows that there are 258 members. The library is open daily and contains 4,755 books, besides many valuable unbound pamphlets and other publications received in exchange from corresponding societies. The number of volumes issued was 4,403. and 1,400 current reviews and magazines.

The reading room is open daily (Sunday excepted) from 8.30 a.m. to 10 p.m. It is supplied with all the leading periodicals and papers, and is largely attended by the members. The magazines, etc., not bound for the library were sold by tender to the members.

Lectures.—A very attractive and instructive course of lectures was arranged, and these were given weekly during the winter, and were more than usually well attended. The lecture by Prof. McNaughton was delivered in the Assembly Hall of the Normal School, but all the others were given in the Society's library.

The programme was as follows:

- (1) Impressions of the British House of Commons, Hon. Sir Louis Davies, K.C.M.G.
- (2) A Bundle of Old Letters, Rev. G. F. Salton, Ph.B.
- (3) Our Forests and their Preservation (with lantern views), Dr. Robert Bell, I.S.O., F.R.S., F.R.S.C., &c.
- (4) Colour Values by Photography (with lantern views), J. S. Plaskett, B.A.
- (5) Browning and the Historical Spirit, Prof. John McNaughton, M.A., (McGill Univ.)
- (6) Glimpses of South America, Dr. Leonard Vaux.
- (7) Romance and Realism in Fiction, Rev. R. J. Hutcheon, M.A.
- (8) Types of Empire, Thos. MacFarlane, M.E., F.R.S.C.
- (9) Student Life in Paris, Harold Routh, B.A., (Bishop's College Lennoxville).

The last lecture was a special one delivered under the patronage of His Lordship the Bishop of Ottawa, who presided as Hon. Chairman.

The member's fees have been raised to \$3.00 per annum, which includes attendance to lectures, with all privileges of library, reading room, etc.

Voluntary subscriptions of \$177.00 were received during the year; this amount was applied to the purchase of new books.

The Treasurer's statement shows that the receipts, including government grant, were \$1,010.45; expenditure, \$907.07; balance on hand, \$103.38.

I recommended the officers I met to try and amalgamate with the Field Naturalists' Club and the public library, so that their extensive library would be of more value to the public.

3. L'Institut Canadien Francaise, Ottawa.

The annual report of the L'Institut Canadien Francaise shows that they had a disastrous fire in February, destroying their furniture and damaging the library, which loss they consider irreparable, especially as regards many rare and valuable books and documents which were destroyed and injured.

It is gratifying to state that on my visit in December they had given up their temporary rooms and everything is now in working order, and, although the insurance received was inadequate to meet losses, they are hopeful for the future.

In consequence of the conflagration the attendance was not so large as formerly, but they succeeded in giving a course of twelve lectures, as follows:

- (1) "The Dreyfus Affair," Auguste Lemieux.
- (2) "Leo XIII. and the Papacy," Rev. Father Lecocq.
- (3) "Brussels," Mr. Edouard F. Surveyer.
- (4) "France," Mr. A. D. DeCelles.
- (5) "Hieroglyphics," Rev. Father Van Bacelaere.
- (6) "A Trip to the North Pole," Capt. Bernier.
- (7) "Women of the XVIIth Century in France," Miss Vianzone (Prof. of French Literature in St. Petersburg Univ.)
- (8) "Artistic Sense of the French Canadian Artisan," M. E. Bouchette.
- (9) "Lecture on Elocution," Miss St. Jean.
- (10) "The Feminism," Rev. Father Delor.
- (11) "Che Lachaud," the great French Lawyer, Auguste Lemieux.
- (12) "Poetry," Henri Desjardins.

The Treasurer's report shows that receipts were \$1,483.65; expenditure, \$2,127.30. The deficit for repairs to building, etc., is \$643.65.

4. St. Patrick's Literary and Scientific Association.

Ottawa.—The annual report of this association shows that, although they expended during the year over \$3,000.00 for their new building they still have a balance on hand.

The officers and members of the association are to be congratulated on having erected a spacious building, with all modern improvements, which cost over \$30,000.00, and has been paid for through the strenuous efforts of the officers and the liberal assistance of the members.

They have an excellent Library, with modern equipments, containing 1,596 books; also a first class reading room well patronized.

The lectures are well attended.

The Treasurer's report shows that the receipts were \$4,106.36; expenditure, \$4,001.65; balance on hand, \$104.71.

5. Ottawa Field Naturalists' Club.

The report of the council of the Ottawa Field Naturalists' Club for the year ending 15th March, 1904, shows that the club has now completed its twenty-fifth year. The completion of a quarter of a century of active organized work was fittingly celebrated by the members of the club. The first of the winter soirees was addressed by speakers who were all members of the first council, and each told briefly of some of the many changes of the past twenty-five years, and the part the club has taken in leading and directing scientific thought during that time.

During the year special efforts have been put forth towards enlisting the teachers and students of the various educational institutions in the work of the club. This has been done by numerous field excursions, lectures and demonstrations, and the addition of a Nature Study department to the Ottawa Naturalist. The result has been to diffuse the work into new channels. A number of the teachers of the city have taken their classes afield for an afternoon's study of the birds, insects, flowers, trees, rocks, soil, etc., of some locality.

Membership.—The total membership is now 266, composed of 258 ordinary members and eight corresponding.

Winter Soirees.—Fortnightly meetings were held through the winter, and were largely attended by members and the general public.

The following is the programme of the past winter:

December 15th. Twenty-fifth Anniversary of the Founding of the Club.

Address of Welcome by Principal J. F. White, of the Normal School.

The President's Address.

The Study of Natural History at Ottawa before the formation of the Club. Lieut.-Col. White, C.M.G.

Botanical conditions round Ottawa twenty-five years ago. R. B. White.

Ottawa as a Natural History Locality twenty-five years ago. Dr. James Fletcher.

The Workers in Natural History at Ottawa twenty-five years ago. Lieut.-Col. W. P. Anderson.

What the Ottawa Field Naturalists' Club has accomplished. Dr. H. B. Small.

1904.

Jan. 5. The Difference and Correspondences between the Avifauna of Ottawa and of the Maryland Alleghanies. Rev. G. Eifrig.

Report of the Geological Branch.

Jan. 19. The recent Landslide on the Lièvre River. Illustrated by lantern slides. Dr. A. E. Barlow.

Report of the Ornithological Branch.

Feb. 2. Sap and Sap Circulation. F. T. Shutt, M.A.

Two Springs. Dr. C. Guillet.

Feb. 16. A Summer's Cruise on the Labrador Coast. Illustrated by lantern slides. Dr. R. A. Daly.

Mar. 1. Colour in Nature. Dr. S. B. Sinclair.

Report of the Entomological Branch.

March. 15. Annual meeting.

Report of the Zoological Branch.

Report of the Botanical Branch.

April 5. Short Talks on how to Collect and Preserve Specimens, with Practical Demonstrations by various members of the Club.

The members of the Entomological Branch have been very active during the year. Fortnightly house meetings have been held during the winter, and at several interesting papers were read. There has been a renewed activity in collecting and studying the insects of the Ottawa District, and good work has also been done by outside members. The leaders have all been exceptionally active and large additions have been made to the local lists of insects.

The Geological Branch report shows that leaders attended the excursions and a larger number than usual joined the Geological Sections on these occasions.

The Ornithological Branch also had leaders at the different excursions to aid in the identification of birds seen and heard. Through the aid of the Honourable Frank Latchford arrangements have been made for the appointment of a special officer to enforce the Provincial Act that prohibits the destruction or trapping of useful birds.

The Ottawa Naturalist.—The seventeenth volume of the Ottawa Naturalist has been completed. It contains twelve numbers of two hundred and twenty-eight pages with eight plates.

Excursions.—Nine sub-excursions were held during the year; these excursions were to places in the immediate vicinity of Ottawa, and were highly successful. Special attention was given to the forest trees, their mode of growth and the various means of identifying them, especially by the buds. The two general excursions were to Chelsea and Aylmer, the former held on the 16th May was attended by over three hundred members and friends of the club. These excursions gave an excellent introduction to Nature Study. Full accounts of the localities visited and the work done at these outings have appeared from time to time in the Ottawa Naturalist.

Work done by the Several Branches.—The work of the branches covers a wide field. The botanical section was exceptionally fortunate in having several of the leaders in Ottawa during the entire season. Prof. John Macoun, in his official capacity, spent the summer in Ottawa and vicinity making a special study of the fungi. He added over two hundred species to the Ottawa flora. Dr. James Fletcher has continued his studies of violets and done much toward the differentiation of species. Dr. C. Guillet has devoted much time to phenological observations, and Mr. D. A. Campbell to the morphology of plants. During the winter several meetings were held at the homes of the members. At each meeting a paper was read and twenty-five papers by leading scientists were published in this volume, besides several short articles, book reviews, etc., also a series of articles on nature study, edited by Dr. J. Fletcher. A large number of copies of each article was printed and distributed to teachers throughout the province.

Receipts, including government grant, \$537.78; expenditure, \$498.60; balance on hand, \$39.18.

6. Ottawa University Society.

The report of the Ottawa University Society shows that the members met once a week to discuss scientific subjects.

The following lectures were given during the session to members and students of the university:

- (1) "The Physiology of Bodily Exercises," Rev. J. A. Lajeunesse.
- (2) "How Plants Behave," O. J. McDonald.

- (3) "Hydraulics," The Evolution of the Water-Wheel, C. J. Jones.
- (4) "Zoology," The Ruminants of the Dominion, O. Seguin.
- (5) "Training and its Effects," Rev. J. A. Lajeunesse.
- (6) "Chemistry and Physics in Magic," with experiments, R. Brynes
- (7) "Carlyle's Estimate of Cromwell," Prof. Gray.
- (8) "Phosphorous and its uses," Rev. G. Gauvreau.
- (9) "Rock Desintegration and formation of Soils," A. McDonald.
- (10) "The X-Rays," Dr. M. O. Boyle.
- (11) "Ancient Rome," illustrated, Rev. C. Sherry, D.D.

The annual excursion of the Society was held at Pelissier's Cave, 25 miles from Ottawa, and the programme was carried out under most favorable conditions.

The main building of the University of Ottawa was destroyed by fire on the 2nd of December. The Scientific Society loses its library containing about 1,000 books, two valuable cameras, photograph apparatus, 250 lantern slides, and miscellaneous apparatus, which, unfortunately, were not insured.

As soon as the new building is finished they intend having weekly lectures, and will give public entertainments to assist them in purchasing new apparatus, etc.

Receipts, including government grant, \$136.00; expenditure. \$131.55; balance on hand, \$4.45.

7. Royal Astronomical Society of Canada, Toronto.

This Society, formerly known as the Toronto Astronomical Society, sent a petition to His Excellency, the Governor-General, in January, 1903, requesting a change of name to "Royal Astronomical Society of Canada." The petitioners show (1) that they encourage research and original work and publish transactions for distribution to members and scientific societies throughout the world; (2) That they have promoted the formation of other societies with similar aims; (3) That they have a library of standard works, maps, charts, globes, etc., to which the public have access; (4) That the petitioners have refracting and reflecting telescopes and other instrumental apparatus; (5) That fortnightly meetings are held at which papers are read and discussed, except in the months of July and August, when open-air meetings are held; (6) That they are in correspondence with more than one hundred societies and observatories in many countries, with which it exchanges reports.

In reply to the petition the following letter was received:

OTTAWA, 27th February, 1903.

SIR,—Referring to the recent petition of the Toronto Astronomical Society to be allowed to use the prefix "Royal" I have now the honor to inform you that the Governor-General has received a dispatch from the Secretary of State for the Colonies acquainting His Excellency that His Majesty the King has been graciously pleased to grant permission to the Toronto Astronomical Society to adopt the title of the Royal Astronomical Society of Canada.

(Signed) JOSEPH POPE,
Under-Secretary of State.

R. F. STUPART, Esq., F.R.S.C.,
President Toronto Astronomical Society, Toronto, Ont.

The following papers were read and discussed in 1903:

- (1) Experiments with Physical Apparatus. A. F. Miller.
 - (2) President's Address. R. F. Stupart.
 - (3) Celestial Measurements. Prof. A. T. DeLury.
 - (4) Stellar Motions. A. F. Miller.
 - (5) Astronomy of Milton. J. A. Paterson, M.A.
 - (6) The Diatonic Scale. Geo. A. Anderson, M.A.
 - (7) Is the Moon a Dead World. J. E. Maybee, M.E.
 - (8) Stellar Motions. A. F. Miller.
 - (9) Man's Place in the Universe. Messrs. Lumsden and Collins.
 - (10) The adjustment of the Equatorial Telescope. F. L. Blake, D.L.S.
 - (11) Rotation, a misleading term as applied to the Sun. A. Harvey, F.R.S.C.
 - (12) Helmholtz. Rev. R. Atkinson.
 - (13) An Evening with the Spectroscope. A. F. Miller.
 - (14) Pleasures of the Telescope. Dr. A. D. Watson.
 - (15) Stonehenge. J. C. Hamilton, LL.D.
 - (16) Radium and Astronomical Physics. J. R. Collins.
 - (17) Uranoliths (aerolites). A. Harvey, F.R.S.C.
 - (18) The Nature of Ether Vibrations. C. A. Chant, M.A.
 - (19) Women's Work in Astronomy. Miss Elsie A. Dent.
 - (20) How I built and equipped my Observatory at Hamilton. D. B. Marsh, Ph.D.
 - (21) Notes on a visit to Greenwich Observatory. J. A. Paterson, M.A.
- Receipts, including government grant, \$749.47; expenditure, \$714.44; balance on hand, \$35.03.

8. Toronto Canadian Institute.

The report of the Canadian Institute shows that the year 1903 was prosperous, both as to the excellence of the papers read and the audiences which attended.

The opening lecture by Dr. L. O. Howard, Director of the Bureau of Entomology, Washington, on "The importation of Pests and Insects," was much appreciated.

The Institute is greatly indebted to Sir Sandford Fleming for an investment which provides an income making it possible to pay the expenses of eminent men of science from points outside of Toronto.

During the year twenty-four papers were read, as follows: Geology, Physiography, etc., 5; Biology and Related Sciences, 4; Physics, 4; Economics, 2; Bibliography and History, 2; Photography, 1; Ethics, 1; Miscellaneous, 5.

The natural history section held general meetings at which papers, etc., were given as follows:

- (1) Exhibition of specimens and Microscopic objects.
- (2) President's Address and paper on "The Auks and Guillemots." John Maughan, Sen.
- (3) Exhibition of Specimens.
- (4) Paper on "Oil Wells." S. Dillon-Mills, M.E.
- (5) "The Cuckoos, and their distribution." J. B. Williams, F.Z.S.
- (6) An evening with the Microscope.
- (7) "Our Native Ferns." Miss Wilkes.
- (8) An evening in the University Museum.
- (9) "Vegetable Parasites." C. Armstrong.
- (10) "The Falconidae." John Maughan, Jur.

- (11) "Notes on the Amoeba." S. Dillon-Mills, M.E.
 (12) "Canadian Woodpeckers." J. B. Williams, F.Z.S.
 (13) "Evolution of the Cedars." E. C. Jeffrey.

All the lectures were illustrated.

In addition to the above three special meetings were held.

During the summer the following excursions were made by the members of the section accompanied by their friends: Alton, Riviere Rouge, The Old Mill on the Humber, The Humber, Niagara Falls, (Foster's Flats), Hemlock Grove Farm, Weston.

The librarian reports as follows: 1,085 volumes and periodicals were loaned, 120 volumes were donated to the library, 163 volumes were bound. Total number of exchanges from scientific societies in different parts of the world, 2,290.

Receipts, including government grant, \$2,393.03; expenditure, \$2,387.92; balance on hand, \$5.11.

9. Wellington Field Naturalists' Club, Guelph.

This Society was paid a special grant of \$100.00, and reports that fortnightly meetings have been held at which papers on Botany, Ornithology and Mammalogy were read and discussed. During the summer field work was done.

10. Historical Societies.

Legislative grants have been paid to Historical Societies as follows:

1. London and Middlesex Historical Society.....	\$100.00
2. Lundy's Lane Historical Society... ..	200.00
3. Niagara Historical Society.....	100.00
Niagara Historical Society, special grant.....	500.00
4. Ontario Historical Society	600.00
5. Wentworth Historical Society.....	100.00
6. Woman's Canadian Historical Society... ..	100.00

APPENDIX J.—REPORT OF THE LIBRARIAN OF THE EDUCATION DEPARTMENT.

*To the Honorable ROBERT A. PYNE, M.D., M.P.P.,
Minister of Education for the Province of Ontario.*

I have the honor to submit herewith the report on the library of the Education Department for the year 1904:

YEARLY RECORD OF BOOKS LOANED TO STUDENTS AND OTHERS.

In the following table a record is given of the number of books loaned during the years 1895-1904, to the students of the Normal and Model schools, and to the teachers and other persons. A record of each book given out is made in a register, the parties borrowing books signing their names, by way of receipt, and as a guarantee that they will return the books in a given time.

Books given out in the month of—	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
January	354	573	699	608	484	526	518	542	587	673
February	804	1,040	1,370	928	868	948	1,124	959	1,036	970
March	1,034	1,270	1,702	1,393	1,158	1,454	1,563	1,084	1,538	978
April	627	1,021	1,111	882	848	766	997	1,187	899	854
May	633	843	923	969	895	911	867	832	901	738
June	354	400	609	677	518	540	576	510	591	482
July	223	32	254	265	256	231	317	336	168	220
August	100	16	184	233	329	224	176	233	152	259
September	415	295	514	410	489	432	411	538	476	378
October	1,130	1,170	1,200	1,043	1,018	1,312	1,058	958	761	776
November	1,063	1,268	1,099	1,024	1,034	1,229	1,014	1,158	687	900
December	597	752	704	464	549	547	516	535	600	480
Totals	7,334	8,680	10,369	8,896	8,446	9,120	9,137	8,872	8,396	7,708

Fully one thousand university students and others interested in education generally patronized the library during the year, while a larger number visited it and consulted the various works of reference.

Number and Subjects of the Books Purchased in the Years 1892-1904.

Year.	Volumes.	Subjects.
1892	388	Education, Science, Literature, Art, Text-books, Miscellaneous.
1893	290	
1894	257	
1895	430	
1896	495	
1897	476	
1898	533	
1899	315	
1900	275	
1901	164	
1902	304	
1903	218	
1904	409	

It will be seen in the following table that large accessions have been made to the library in Fiction and Literature. This was rendered necessary in order to meet a demand for the better class of current fiction and to replace worn-out books which had to be discarded.

The Number of Books Purchased in 1900-1904 was as follows

Subjects.	1900	1901	1902	1903	1904
Pedagogy	23	29	40	7	18
Science, (Political Economy, Anthropology, etc.)	24	8	11	3	10
Philosophy and Ethics	5	12	9	8	17
Industrial and Domestic Science	23	2	8	6	24
Poetry	18	1	1	10	13
Fiction and Practical Life	26	5	9	19	79
Literature	78	3	46	35	92
Text-Books	65	32	45	27	37
Miscellaneous (History, Biography, Reference Works)	13	72	102	61	84
Natural History and Nature-Study			33	27	20
Arts				15	15
Totals	275	164	304	218	409

The large increase in the number of text books donated to the library as set forth in the subjoined table is accounted for by the fact that your predecessor, the Hon. R. Harcourt, while in England in 1904, made arrangements with Messrs. Adam & Charles Black, & Longmans, Green & Co., of London, England, to place the text books published by them on the shelves of the library for examination by those interested.

Number of Books Donated to the Library 1898-1904 :

	1898	1899	1900	1901	1902	1903	1904
Text-Books	49	74	65	111	41	144	349
Miscellaneous .....	.....	.....	7	13	54	95	16
Totals	49	74	72	124	95	239	365

Newspapers and Magazines Received during the Years 1900-1904 :

	1900	1901	1902	1903	1904
Number of daily and weekly newspapers received	86	91	88	89	109
Number of magazines and other periodicals received	100	102	100	111	94
Totals	186	193	188	200	203

Books, Magazines, etc., Bound during the Years 1893-1904 :

1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
109	136	141	98	99	90	94	37	83	71	4	81

Official Reports on Education in Different Countries Received during 1901-1904 :

	1901	1902	1903	1904
Great Britain and Ireland	26	43	53	59
Various Provinces of the Dominion	42	42	45	31
Australasia—				
Victoria .....	.....	5	3	2
New South Wales	1	3	.....	3
South Australia .....	.....	1	1	1
Western Australia	1	1	2	1
Queensland	1	.....	.....	2
Tasmania	1	1	.....	2
New Zealand	9	29	18	26
Other British Possessions :				
Mauritius .....	.....	1	.....	.....
Cape of Good Hope	1	1	2	2
Natal	1	1	1	1
Jamaica	2	1	1	1
Cape Town .....	.....	.....	12	1
Barbadoes	1	1	1	1
British Guinea	1	2	1	1
Straits Settlements	1	.....	.....	.....
Hong Kong .....	.....	1	.....	.....

Official Reports on Education in Different Countries Received during 1901-1904.
Concluded.

	1901	1902	1905	1904
Transvaal.....				1
Various States of the American Union.....	117	54	81	65
Miscellaneous.....				
Brazil.....		3		
Argentine Republic.....	16	12	10	2
Uruguay.....	1		5	
France.....		8	4	2
Germany.....	1		1	3
Portugal.....		2	2	1
Switzerland.....	4	6	2	3
Italy.....	19	29	16	8
Mexico.....		1		2
Japan.....	1		2	1
Totals.....	247	248	263	217

Miscellaneous Pamphlets Received in 1901-1904:

	1901	1902	1903	1904
From various Countries.....	80	75	65	12
From the Dominion of Canada and its Provinces.....	28	74	53	27
Totals.....	108	149	118	39

Many Art books (a list of which is appended) illustrating, in many cases, the best productions of the world's greatest landscape and portrait painters are conspicuously displayed and made easily accessible to all visitors to the library whether teachers, students or other persons. These works have an elevating and refining influence, and are much appreciated and enjoyed by our visitors.

1, England's History, as pictured by famous painters; 2, Glimpses of Canada; 3, Glimpses of the World; 4, America's Wonderland; 5, Beautiful Britain; 6, Sights and Scenes in England and Wales; 7, Photographs of portraits of the Lieutenant-Governors of Upper Canada, 1792-1841, Governor-Governor-Generals of United Canada, 1841-1867, Lieutenant-Governors of Ontario, 1867-1902; 8, Photographs of the Algoma Legislative tour; 9, Sights and Scenes of Oxford City and University; 10, California and Alaska; 11, Americans, Charles Dana Gibson; 12, The Weaker Sex, Charles Dana Gibson; 13, Gainsborough, Constable and Turner; 14, Notes on European Picture Galleries; 15, The Madonna in Art, Hurl; 16, Child Life in Art, Hurl; 17, Love in Art, Potter; 18, Saints in Art, Clement; 19, Heroines of the Bible in Art, Clement; 20, Shakespeare in Art, Sadakichi Hartmann; 21, Angels in Art, Clement; 22, Christ in Art, French; Riverside Art Series, 12 volumes by Estelle Hurl; 23, Raphael; 24, Rembrandt; 25, Michael Angelo; 26, Reynolds; 27, Murillo; 28, Greek Sculpture; 29, Titian; 31, Landseer; 32, Tuscan Sculpture; 33, Van Dyck; 34, Correggio; 35, A Popular Handbook to the National Gallery; 36, Memoirs of Italian Painters, Anna Jameson; 37, Life and Correspondence of J. M. W. Turner, Thornbury; 38, Life's Roses, a volume of selected poetry; 39, The Makers of British Art, Landseer; 40, The Makers of British Art, Turner; 41, The Makers of British Art, Romney; 42, British Painters of

the Eighteenth and Nineteenth Centuries; 43, Tennyson's Heroes and Heroines; 44, The Voice of the Sea; 45, Pictures in the Wallace Collection; 46, A Dog Day; 47, Art Pictorial and Industrial; 48, Literary Landmarks of Oxford; 49, Royal Academy Pictures; 50, Four American Universities; 51, Newnes' Art Library, Botticelli; 52, Newnes' Art Library, Sir Joshua Reynolds; 53, Newnes' Art Library, Velasquez; 54, John Leech's Pictures of Life and Character, from the collection of Mr. Punch, 3 volumes; 55, The Heart of Hyacinthe, Onoto Watanna; 56, The Old Country House, Richard Le Gallienne; 57, Phil May's Sketch Book, 2 copies; 58, The Background of Literature, H. M. Mabie; 59, Masterpieces of the Great Artists; 60, The Genius of J. M. W. Turner; 61, The Pilgrim's Progress, Bunyan; 62, Rare Cartoons of Canadian History; 63, Paris, Grant Allen, 2 volumes; 64, Belgium, Grant Allen, 2 volumes; 65, Salons Colonial and Republican; 66, The Life of the Ancient Mexicans; 67, Robert Burns, rare print collection; 68, The Art of the Pitti Palace, Julia deW. Addison; 69, Japan, the Place and its People, G. Waldo Brown; 70, Holland, Nico Jungman; 71, Happy England, as painted by Helen Allingham and Marcus B. Huish; 72, The Hundred Best Pictures; 73, George Morland, G. C. Williamson; 74, A Souvenir of Canadian Cities, J. Phillips; 75, Westminster Abbey, painted by J. Fulleylove, R.I., described by Mrs. A. Murray Smith; 76, The Cathedrals of England, M. J. Taber; 77, Great Englishmen of the Sixteenth Century, Sidney Lee; 78, Pictures of the Tate Gallery; 79, The Old Masters and Their Pictures; 80, Great Masters in Painting and Sculpture; 81, The British Isles.

On taking charge of the library last year I made an examination of the books in order to ascertain how far they met the requirements of a "student's library," as that is the primary object of the existence of the library of the Education Department.

I have come to the conclusion that while there are works in the library of great value to the student body, there are many others which should have a place on its shelves.

Before attempting to recommend the purchase of new books it was necessary to relieve the library of many books, reports, newspaper files, etc., which were the accumulation of years, and which, while valuable in themselves, were unsuitable for a library originated with the object of helping the student in his work from day to day.

How to get rid of this material was a problem, but a problem that, after all, was soon solved. Mr. Alexander Fraser, the Provincial Archivist, regarded this literature as being of special value to his department, and it was at once transferred there. A list of what was sent to the Bureau of Archives is given in this report.

Working Rules for the Library.

1. The library shall be educational, adapted more particularly to the wants of the student body.

2. Every effort shall be made to build up a library which shall touch the life and work of the student at every point throughout the whole course of professional studies.

3. The seminary idea of institutional libraries shall be followed as far as accommodation and convenience will allow.

4. Special arrangements will be made for the wants of teachers and officials.

5. The shelving arrangement shall be based on the decimal system under a topical classification.

6. In expending the annual appropriation the librarian shall give first consideration to the purchase of books in current use by the students and teachers.

7. Should special outlays be required the Hon. the Minister of Education shall be consulted, and his consent obtained.

8. Quarterly catalogues shall be prepared and made accessible to the students.

9. An accession and a stock book will be kept, into which every book, etc., under the control of the library, will be entered.

10. The librarian shall prepare an annual report, which shall be submitted to the Hon. the Minister of Education for publication as an appendix to the Minister's annual report.

11. The librarian shall be held responsible for the library and its working, and shall be directly accountable to the Hon. the Minister of Education.

HENRY R. ALLEY,
Librarian.

Under instructions from the Ex-Minister of Education the following distribution of works and newspapers from this library was made to the institutions, newspaper offices and persons named :

To the Industrial School at Mimico some forty-four volumes, partly worn, of Dickens, Scott and Thackeray's works.

To the University of Ottawa, which lost its library by fire, the reports of the Chief Superintendent and Minister of Education for the years 1845 to 1902, inclusive; Journal of Education, 1848 to 1877; Documentary History of Education in Upper Canada, vols. 2 to 10; Vassar's Lives of the Painters, 2 vols.; Reports of Commissioner of Education at Washington, 6 vols.; Smithsonian Reports, 3 vols.; Hodgkin's Report on Ontario at Philadelphia Exhibition of 1876; Departmental Statutes and School Regulations, 1891-1896; Normal School Jubilee Report, 1897; Hodgkin's Ryerson Memorial Volume; Hodgkin's School Architecture, 1876-1886; Revised School Law of 1885; Millar's School System of New York; Hodgkin's School Manuals, 1861-1864; Ontario Scripture Readings; Les Guepes Canadiennes, by Aug. Laperriere; Hodgkin's Separate Schools in Upper Canada, 1897; Lectures and Reports on Education, by Horace Mann; University Problems, by Daniel C. Gilman; Universities of Canada, Great Britain and the United States, by G. W. Ross; Handbook of Canada, 1897.

To Victoria University, Toronto, bound volumes of the New York Methodist, 1868-9; London Weekly Herald and Evangelical Witness, 1872; Toronto Christian Guardian, four volumes; Toronto Christian Journal, 1872-5; Toronto Church Herald, 1873-4; Toronto Church, 1843-7; Canadian Baptist, 1872-5; Hamilton Christian Advocate, 1870-5; London, Ont., Evangelical Witness, 1873-4; Toronto British American Presbyterian, 1873-5; Montreal Gazette, 1870-6. In all 20 volumes.

To the Globe Printing Company, Toronto, fyles of the Globe, 1864 to 1874, inclusive, 10 volumes.

To the Spectator Printing Company, Hamilton, fyles of the Spectator for the years 1851-57, 1860, 1871-76. 14 volumes.

To Alexander Fraser, Esq., M.A., Provincial Archivist, Parliament Buildings, January 12th, 1904. 21 odd departmental reports, volumes 2 to 10 of the Documentary History of Education in Upper Canada, Reports of the Chief Superintendent and Minister of Education for the years 1847 to 1902, Journal of Education, Upper Canada, 1848 to 1877, a set of Modern Public School Text Books, 17 volumes, a set of 15 volumes of Modern High School Text Books, 19 volumes of old Public and High School Text Books.

To Mr. Fraser, November 4th, 1904: Bound volumes of the New York Methodist, New York Observer, New York Times, New York Albion, Toronto Daily Telegraph, Toronto Mail, Toronto Leader, London Free Press, London Advertiser, London Prototype, London Weekly Herald and Prototype, London Weekly Herald, Toronto National, Toronto Canadian Freeman, Toronto Mirror, Toronto Express, Toronto British Colonist, Belleville Intelligencer, Peterboro' Review, Brantford Courier, Brockville Recorder, Port Hope Times, Stratford Beacon, Woodstock Times, Kingston Chronicle and News, Ottawa Times, Ottawa Daily Citizen, Journal de Quebec, London (Eng.) Watchman, London (Eng.) Evening Mail, Montreal Canadian Courant, Toronto Irish Canadian, Montreal Argus, Montreal Weekly Witness, Montreal True Witness, Toronto Echo, New York Weekly Review, The Fredericton (N.B.) Headquarters, in all about 108 volumes.

To Mr. Fraser, November 22nd, 1904: History of Public Offices, 1846; Report on Public Departments, 1839; 22 volumes Ontario Gazette, 1889-1899; 23 volumes Canada Gazette, 1841-1863; Bills of Canada, 2 volumes; 8 volumes Canadian Reports of Commissioners, 1828-1853; 16 volumes Parliamentary Papers relating to Canada, 1828-1844; Reports of Finance, 1850; 6 volumes of Imperial Parliamentary Papers relating to Canada, 1784, 1828-1835, 1836; Public Accounts, Canada, 1839-51; 2 volumes Canadian Parliamentary Papers, 1812-1819; 13 volumes United States Pacific Railroad Surveys; 10 volumes of United States Senate Reports of Meteorological Observations, 1854-59; 12 volumes United States Coast Surveys; Miscellaneous Collection of old English Colonial Reports; Miscellaneous Collection of old Canadian Blue Books.

To Mr. Fraser, November 24th, 1904: 23 pamphlet cases on Canadian Pacific Railway, Intercolonial, Grand Trunk, Great Western and other Canadian railways, a large number of old Toronto and other Canadian directories, Chambers' Political Annals, 1763, English Blue Books relating to Colonies, miscellaneous collection United States Reports.

Sent to Mr. Fraser, December 15th, 1904: Dawson's Lake Superior and Red River Report of 1850; Maps of Canada, 1857; 6 volumes of Journals and Appendices of Lower Canada, 1834-37; 2 volumes of Volunteer Review; 3 volumes of New York Albion; 6 volumes of Maps of Canada, 1857; 5 volumes of Plans to Geological Reports, 1857; 2 volumes Les Ursulines de Quebec, 1864; 26 volumes of Geological Reports of Canada, 1870 to 1900; surplus numbers of Dominion Sessional Papers, also miscellaneous Parliamentary Papers and Blue Books.

HISTORIOGRAPHY.

The eleventh volume of the "Documentary History of Education in Upper Canada," covering the years 1853-55, was published during the year. As the Editor remarks in the Preface, "This volume marks a new epoch in the progress and expansion of education in this province. In it are recorded the various steps, incidentally taken, and, to a certain extent, without concert among the educational authorities, to bring about a greatly improved state of things. Not only the condition, but the status and future of elementary education were specifically dealt with, and intermediate education also received a new impulse in the organization, and consequent improvement in the condition of the County Grammar Schools. Higher education, also, received at the same time a large share of attention; the whole course of instruction in the University of Toronto was thoroughly revised, so as to adjust the curriculum to the needs of the country, and also to produce a degree of harmony—not hitherto attained—in the working of the various Departments of the University."



REPORT
OF THE
Minister of Education

Province of Ontario

FOR THE YEAR

1904

PART II.

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:
Printed and Published by L. K. CAMERON, Printer to the King's Most Excellent Majesty.
1905.



W. C. BUCK BRO'S & RUTTER, LIMITED, PRINTERS,
TORONTO.

TABLE OF CONTENTS

PART II.

	PAGE.
APPENDIX K.—MANUAL TRAINING AND TECHNICAL EDUCATION.	
Report of the Inspector... ..	241
APPENDIX L.—STATISTICS OF COUNTY MODEL SCHOOLS, 1904.....	252
APPENDIX M.—PROVINCIAL NORMAL AND MODEL SCHOOLS ; ONTARIO NORMAL COLLEGE.	
I. Provincial Normal and Model Schools, Toronto .	
1. Staff of Toronto Normal School; students admitted.....	256
2. Staff of Provincial Model School, Toronto; number of pupils.....	256
II. Provincial Normal and Model Schools, Ottawa.	
1. Staff of Ottawa Normal School; students admitted.....	256
2. Staff of Provincial Model School, Ottawa; number of pupils.....	257
III. Provincial Normal School, London.	
Staff; Students admitted... ..	257
IV. Ontario Normal College.	
Staff and students admitted.....	257
APPENDIX N.—HIGH SCHOOL CADET CORPS, 1904.....	258
APPENDIX O.—SUPERANNUATED TEACHERS, 1904.	
1. Allowances granted during 1904.....	259
2. Summary for years 1882-1904.....	259
APPENDIX P.—REPORT OF THE PRESIDENT OF THE SCHOOL OF PRACTICAL SCIENCE	260
APPENDIX Q.—REPORT OF THE PRESIDENT OF THE UNIVERSITY OF TORONTO.....	265
Addendum A.—Report of the Dean of the Faculty of Arts.....	272
Addendum B.—Report of the University College.....	277
Addendum C.—Victoria University.....	278
Addendum D.—Faculty of Medicine.....	279
Addendum E.—Applied Science and Engineering.....	283
Addendum F.—The Library.....	284
Addendum G.—Biological Museum.....	285
Addendum H.—Memorandum Regarding Geological and Mineralogical Museum	286
Addendum J.—University of Toronto Studies.....	286
Addendum K.—Marine and Lacustrine Biological Stations of Canada.....	287
Addendum L.—Financial Statements.	
I. Faculty of Arts.....	288
II. Faculty of Medicine.....	296
III. Faculty of Applied Science and Engineering.....	298
Addendum M.—List of Papers and Works by Members of Faculties and Research Students, for the year 1903-4.....	299



WARWICK BRO'S & RUTTER, LIMITED, PRINTERS,
TORONTO.

TABLE OF CONTENTS

PART II.

	PAGE.
APPENDIX K.—MANUAL TRAINING AND TECHNICAL EDUCATION.	
Report of the Inspector.....	241
APPENDIX L.—STATISTICS OF COUNTY MODEL SCHOOLS, 1904.....	252
APPENDIX M.—PROVINCIAL NORMAL AND MODEL SCHOOLS ; ONTARIO NORMAL COLLEGE.	
I. Provincial Normal and Model Schools, Toronto .	
1. Staff of Toronto Normal School; students admitted.....	256
2. Staff of Provincial Model School, Toronto; number of pupils.....	256
II. Provincial Normal and Model Schools, Ottawa.	
1. Staff of Ottawa Normal School; students admitted.....	256
2. Staff of Provincial Model School, Ottawa; number of pupils.....	257
III. Provincial Normal School, London.	
Staff; Students admitted... ..	257
IV. Ontario Normal College.	
Staff and students admitted.....	257
APPENDIX N.—HIGH SCHOOL CADET CORPS, 1904.....	258
APPENDIX O.—SUPERANNUATED TEACHERS, 1904.	
1. Allowances granted during 1904.....	259
2. Summary for years 1882-1904.....	259
APPENDIX P.—REPORT OF THE PRESIDENT OF THE SCHOOL OF PRACTICAL SCIENCE	260
APPENDIX Q.—REPORT OF THE PRESIDENT OF THE UNIVERSITY OF TORONTO.....	265
Addendum A.—Report of the Dean of the Faculty of Arts.....	272
Addendum B.—Report of the University College.....	277
Addendum C.—Victoria University.....	278
Addendum D.—Faculty of Medicine.....	279
Addendum E.—Applied Science and Engineering.....	283
Addendum F.—The Library.....	284
Addendum G.—Biological Museum.....	285
Addendum H.—Memorandum Regarding Geological and Mineralogical Museum	286
Addendum J.—University of Toronto Studies.....	286
Addendum K.—Marine and Lacustrine Biological Stations of Canada.....	287
Addendum L.—Financial Statements.	
I. Faculty of Arts.....	288
II. Faculty of Medicine.....	296
III. Faculty of Applied Science and Engineering.....	298
Addendum M.—List of Papers and Works by Members of Faculties and Research Students, for the year 1903-4.....	299



WARWICK BRO'S & RUTTER, LIMITED, PRINTERS,
TORONTO.

TABLE OF CONTENTS

PART II.

	PAGE.
APPENDIX K.—MANUAL TRAINING AND TECHNICAL EDUCATION.	
Report of the Inspector.....	241
APPENDIX L.—STATISTICS OF COUNTY MODEL SCHOOLS, 1904.....	252
APPENDIX M.—PROVINCIAL NORMAL AND MODEL SCHOOLS ; ONTARIO NORMAL COLLEGE.	
I. Provincial Normal and Model Schools, Toronto .	
1. Staff of Toronto Normal School; students admitted.....	256
2. Staff of Provincial Model School, Toronto; number of pupils.....	256
II. Provincial Normal and Model Schools, Ottawa.	
1. Staff of Ottawa Normal School; students admitted.....	256
2. Staff of Provincial Model School, Ottawa; number of pupils.....	257
III. Provincial Normal School, London.	
Staff; Students admitted... ..	257
IV. Ontario Normal College.	
Staff and students admitted.....	257
APPENDIX N.—HIGH SCHOOL CADET CORPS, 1904.....	258
APPENDIX O.—SUPERANNUATED TEACHERS, 1904.	
1. Allowances granted during 1904.....	259
2. Summary for years 1882-1904.....	259
APPENDIX P.—REPORT OF THE PRESIDENT OF THE SCHOOL OF PRACTICAL SCIENCE	260
APPENDIX Q.—REPORT OF THE PRESIDENT OF THE UNIVERSITY OF TORONTO.....	265
Addendum A.—Report of the Dean of the Faculty of Arts.....	272
Addendum B.—Report of the University College.....	277
Addendum C.—Victoria University.....	278
Addendum D.—Faculty of Medicine.....	279
Addendum E.—Applied Science and Engineering.....	283
Addendum F.—The Library.....	284
Addendum G.—Biological Museum.....	285
Addendum H.—Memorandum Regarding Geological and Mineralogical Museum	286
Addendum J.—University of Toronto Studies.....	286
Addendum K.—Marine and Lacustrine Biological Stations of Canada.....	287
Addendum L.—Financial Statements.	
I. Faculty of Arts.....	288
II. Faculty of Medicine.....	296
III. Faculty of Applied Science and Engineering.....	298
Addendum M.—List of Papers and Works by Members of Faculties and Research Students, for the year 1903-4.....	299



WARWICK BRO'S & RUTTER, LIMITED, PRINTERS,
TORONTO.

TABLE OF CONTENTS

PART II.

	PAGE.
APPENDIX K.—MANUAL TRAINING AND TECHNICAL EDUCATION.	
Report of the Inspector.....	241
APPENDIX L.—STATISTICS OF COUNTY MODEL SCHOOLS, 1904.....	252
APPENDIX M.—PROVINCIAL NORMAL AND MODEL SCHOOLS ; ONTARIO NORMAL COLLEGE.	
I. Provincial Normal and Model Schools, Toronto .	
1. Staff of Toronto Normal School; students admitted.....	256
2. Staff of Provincial Model School, Toronto; number of pupils.....	256
II. Provincial Normal and Model Schools, Ottawa.	
1. Staff of Ottawa Normal School; students admitted.....	256
2. Staff of Provincial Model School, Ottawa; number of pupils.....	257
III. Provincial Normal School, London.	
Staff; Students admitted... ..	257
IV. Ontario Normal College.	
Staff and students admitted.....	257
APPENDIX N.—HIGH SCHOOL CADET CORPS, 1904.....	258
APPENDIX O.—SUPERANNUATED TEACHERS, 1904.	
1. Allowances granted during 1904.....	259
2. Summary for years 1882-1904.....	259
APPENDIX P.—REPORT OF THE PRESIDENT OF THE SCHOOL OF PRACTICAL SCIENCE	260
APPENDIX Q.—REPORT OF THE PRESIDENT OF THE UNIVERSITY OF TORONTO.....	265
Addendum A.—Report of the Dean of the Faculty of Arts.....	272
Addendum B.—Report of the University College.....	277
Addendum C.—Victoria University.....	278
Addendum D.—Faculty of Medicine.....	279
Addendum E.—Applied Science and Engineering.....	283
Addendum F.—The Library.....	284
Addendum G.—Biological Museum.....	285
Addendum H.—Memorandum Regarding Geological and Mineralogical Museum	286
Addendum J.—University of Toronto Studies.....	286
Addendum K.—Marine and Lacustrine Biological Stations of Canada.....	287
Addendum L.—Financial Statements.	
I. Faculty of Arts.....	288
II. Faculty of Medicine.....	296
III. Faculty of Applied Science and Engineering.....	298
Addendum M.—List of Papers and Works by Members of Faculties and Research Students, for the year 1903-4.....	299



**WARWICK BRO'S & RUTTER, LIMITED, PRINTERS,
TORONTO.**

TABLE OF CONTENTS

PART II.

	PAGE.
APPENDIX K.—MANUAL TRAINING AND TECHNICAL EDUCATION.	
Report of the Inspector.....	241
APPENDIX L.—STATISTICS OF COUNTY MODEL SCHOOLS, 1904.....	252
APPENDIX M.—PROVINCIAL NORMAL AND MODEL SCHOOLS ; ONTARIO NORMAL COLLEGE.	
I. Provincial Normal and Model Schools, Toronto .	
1. Staff of Toronto Normal School; students admitted.....	256
2. Staff of Provincial Model School, Toronto; number of pupils.....	256
II. Provincial Normal and Model Schools, Ottawa.	
1. Staff of Ottawa Normal School; students admitted.....	256
2. Staff of Provincial Model School, Ottawa; number of pupils.....	257
III. Provincial Normal School, London.	
Staff; Students admitted... ..	257
IV. Ontario Normal College.	
Staff and students admitted.....	257
APPENDIX N.—HIGH SCHOOL CADET CORPS, 1904.....	258
APPENDIX O.—SUPERANNUATED TEACHERS, 1904.	
1. Allowances granted during 1904.....	259
2. Summary for years 1882-1904.....	259
APPENDIX P.—REPORT OF THE PRESIDENT OF THE SCHOOL OF PRACTICAL SCIENCE	260
APPENDIX Q.—REPORT OF THE PRESIDENT OF THE UNIVERSITY OF TORONTO.....	265
Addendum A.—Report of the Dean of the Faculty of Arts.....	272
Addendum B.—Report of the University College.....	277
Addendum C.—Victoria University.....	278
Addendum D.—Faculty of Medicine.....	279
Addendum E.—Applied Science and Engineering.....	283
Addendum F.—The Library.....	284
Addendum G.—Biological Museum.....	285
Addendum H.—Memorandum Regarding Geological and Mineralogical Museum	286
Addendum J.—University of Toronto Studies.....	286
Addendum K.—Marine and Lacustrine Biological Stations of Canada.....	287
Addendum L.—Financial Statements.	
I. Faculty of Arts.....	288
II. Faculty of Medicine.....	296
III. Faculty of Applied Science and Engineering.....	298
Addendum M.—List of Papers and Works by Members of Faculties and Research Students, for the year 1903-4.....	299

APPENDIX R.—CERTIFICATES OF TEACHERS IN PROVINCE, FEBRUARY, 1905..... 303

APPENDIX S.—LIST OF CERTIFICATES ISSUED BY THE DEPARTMENT, 1904, ETC.

1. Inspectors' Certificates.....	304
2. High School Principals and Specialists.....	304
3. High School Assistants and Specialists.....	305
4. Summary of Public School Teachers' Certificates.....	305
5. First Class Certificates.....	305
6. Second Class Certificates.....	306
7. Kindergarten Directors.....	308
8. Kindergarten Assistants.....	308
9. Domestic Science.....	308
10. Temporary and Extended Certificates.....	309
11. Professional Examinations.....	309

APPENDIX T.—MEMBERS OF THE EDUCATIONAL COUNCIL, AND BOARDS OF EXAMINERS;
LISTS OF ASSOCIATE EXAMINERS; AND HIGH SCHOOL PRINCIPALS AND
ASSISTANTS.

I. Members of Educational Council, 1904-1905.....	309
II. Boards of Examiners, 1905.....	309
III. Associate Examiners, 1904.....	310
IV. Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.....	312

REPORT
OF THE
MINISTER OF EDUCATION
For the Year 1904.

PART II.

APPENDIX K—*MANUAL TRAINING AND TECHNICAL EDUCATION.*

REPORT OF THE INSPECTOR.

HON. R. A. PYNE, M.D., M.P.P.,

Minister of Education, Toronto.

SIR,—I beg to submit herewith my fourth Annual Report on Manual Training, Technical Education and Art Instruction as carried on in the schools of this Province.

Considerable progress has been made, and though much remains to be done before these subjects are generally adopted and efficiently taught, the result so far achieved may fairly be regarded as satisfactory. Teachers are conservative. Changes in educational method and practice are of slow growth and rightly so. Each change made should receive the most careful consideration and nothing new introduced simply because it is new.

Four years ago there was not a single Manual Training School or Household Science department in the Province. To-day there are in active operation over thirty schools in which Manual Training is taken and eighteen in which Household Science is taught, while several other educational authorities are considering the advisability of their introduction. All these schools receive generous aid from the Department, and it is only by the continuance of this aid that these necessarily expensive subjects can be further introduced and extended. The difficulties in the way do not usually arise from the disinclination of the people. On the contrary there exists an earnest desire in many quarters that these branches should be included in the curriculum.

They are optional and for many years must remain so. It is only as the benefits arising from them come to be understood and the difficulties in the way of their introduction gradually removed, that we can hope for their general adoption. The main obstacles seem to be as follows:—

1. The necessarily expensive equipment.
2. The provision of suitable accommodation.
3. The scarcity of qualified teachers.

The cost of the equipment is being largely met by grants from the Department and in this connection it should be remembered, that efficiency, stability and permanence are the only tests of cheapness. The best will always be found to be the cheapest and in many cases the saving of a few dollars in the initial cost of the equipment has been found to entail a much greater expense later on, in the way of repairs, adjustments and alterations.

Many schools anxious to take up the work have all their available accommodation taxed to the utmost capacity. Under these circumstances, in the anxiety to introduce Manual Training and Household Science, there arises a tendency to think that any room, too poorly lighted and too badly ventilated for ordinary class room purposes is "good enough." This tendency requires to be strenuously resisted and it should be taken as an axiom that Manual Training and Household Science require for their efficient practice, rooms just as well lighted and effectively ventilated as any other school subject. The best time for installing these subjects is when a new building or an addition to an old building is being contemplated. At this time proper, and effective provision can be economically made. I hope to see the time speedily arrive when no new building will be planned or erected without some provision being made for work of a practical character with tools and materials. The growing industrial importance of some of our smaller towns and cities renders this of great moment. More than 6,000 boys and 2,000 girls are receiving weekly instruction and where once introduced I know of not a single instance where these subjects have been discontinued. Over \$45,000 has been spent on equipment and about \$40,000 on special buildings and alterations to existing buildings, to adapt them for this purpose.

Probably the greatest obstacle of all is the fact that properly trained and efficiently qualified teachers are not to be obtained. One of the best equipped schools in the Province has remained closed since June last owing to this scarcity, and in two others, teachers with either no qualifications at all or very poor ones have been unsuccessfully attempting to do the work. I here wish to call your attention to regulations 140, 141 and 145, which read as follows:—

140. Subject to the conditions herein mentioned the Macdonald Institute, Guelph, shall be the only institution recognized by the Education Department for the training of teachers (for Manual Training.)
141. The Macdonald Institute shall provide to the satisfaction of the Education Department suitable courses of study as well as adequate equipment and instruction for students desiring to become teachers of Manual Training:
145. No grant shall be paid by the Government towards a Department of Manual Training unless the teacher who has charge of such Department is duly qualified as herein provided.

I have to report that the conditions imposed by Regulation 141 have not yet been carried out, but a metal work equipment is now being installed in temporary quarters and it is to be earnestly hoped that sufficient money will be appropriated to enable all the conditions and requirements to be speedily and satisfactorily met. While this Regulation remains unfulfilled it is difficult if not impossible for the Education Department to fully carry out Regulations 140 and 145.

There is still an impression abroad in some quarters that an expert mechanic is the best teacher for this work and one Board of Education has made a request to be allowed to employ such an one but it cannot be too strongly insisted upon that for any success in *educational Manual Training* the trained teacher must be engaged. He must be a teacher first and a teacher always. Of course, it is essential that he should possess a certain amount of mechanical skill—the more the better—but the success of a Manual Training Instructor does not depend upon the amount of mechanical skill he possesses but upon his teaching ability either natural or acquired. The trained teacher and the expert mechanic look at things from a different point of view and the difference between them is totally irreconcilable. The mechanic, by his training and his environment, is forced ever to have in mind the quantity of work turned out, and the quality need only be sufficiently good to sell. The exigencies of industrial life, and the keenness of competition have forced him to place the best work in sight, and to think less of the hidden parts. The true teacher will bestow equal care upon all parts of an object whether seen or unseen. "Putty," "glue and saw-dust" will have no place in his scheme of education. It is the producer and not the product that the teacher must consider, while in the workshop the product is of first importance and the producer comes second. A long and varied experience both at home and abroad has led me to the conclusion that the broader the culture, the greater the academic training, the greater is the success of a Manual Training instructor. In view of this it becomes a matter worthy of the gravest consideration whether something should not be done with reference to the training of teachers for this important work, in connection with one of the Universities, and a course established leading to a degree in Manual Training which should rank with the other degrees granted. This plan has been followed with much success in the United States. The Universities have here an opportunity of showing that they have some concern with primary and secondary education, and it is to be hoped that this will not be added to the list of "lost opportunities." Whether it be decided to train teachers for this work at the Macdonald Institute, the Normal College, or the Universities something should be done quickly as properly qualified teachers are required and cannot be obtained.

The new curriculum adopted last August marks a distinct advance particularly upon the lines of Art and Constructive work and follows very closely the plans now being followed in the best schools in England and the United States. Steps should at once be taken to put it into active operation so that it shall no longer remain what it is largely at present—a curriculum on paper only. These subjects are new to the teachers and their previous training has done little to fit them to give the necessary instruction. They require information respecting materials, methods, and plans, and measures should be taken either through Summer Schools, Teachers' Institutes, or the issue of bulletins by this Department to provide them with it and bring to their attention examples of good work already done, without which a number of them are entirely at sea. I have a list, partly prepared, giving in-

formation respecting the best books and examples for the use of teachers, which, when complete, I shall ask the Department to issue as a bulletin. While in England during the past summer I devoted considerable attention to this question of Art instruction in the Public Schools and collected many examples of the work done. These were picked at random and while they contain many excellent drawings, yet drawings showing only average ability are included among them. In some cases the work of a whole class was given to me and in one case I brought away the work of a whole school, done on the day I visited it. If a selection of these could be brought to the notice of the teachers assembled in their institutes they might do much to stimulate interest and show what can be done with brush, crayon and pencil. In many of the English towns the work is under the direction of the local School of Art. I visited six typical towns and a number of rural schools and of all the work I saw that in the town of Leicester which has a population of about 250,000 was by far superior to all others. The scheme adopted here is the result of a process of evolution which has been in progress during the past six years. It is marked by much artistic feeling as well as constructive practical utility. The educational authority of this town issues as a guide to its teachers thirteen sets of cards (one for each standard or book) containing in all many hundreds of examples of work in pencil, brush, crayon, chalk, etc., excellently re-produced on that shade of paper which best suits the particular example. The examples given are not intended in any case to be used as copies, and the syllabus derives its great value from the wealth of suggestion which it contains and the intelligent manner in which its suggestions are adopted or adapted by the teacher to suit particular needs and circumstances. The Board of Education, Whitehall, issues an illustrated syllabus to accompany their circular on primary drawing which is an excellent presentation of the various parts of the subject.

Several collections of twenty or thirty of the most useful books on these subjects should be formed and circulated amongst the teachers through their institutes, for they are anxious to secure the best assistance but owing to low salaries are unable to purchase the books for themselves. In many of the large English Council (Public) Schools a separate Art room is provided, and to this the various classes proceed for one, two, or more periods per week. This room is large, well lighted and decorated with the best examples obtainable so that the surroundings of the child continually exert a refined art influence, which to some extent is reflected in the work. The decoration of the school room itself receives much attention and the effect is in a number of cases most pleasing and beneficial. Considerable attention has been paid to this matter in the small rural school. Art and Constructive work always achieves the greatest success where it is co-related with the general work of the school, and is not regarded as a thing apart from the general school life. The majority of our class rooms excel in one particular, and that is in the provision of sufficient blackboard accommodation for pupils' practice. While it is neither possible nor desirable that every school should have a properly equipped Manual Training room, yet it is essential that some practical work should be done in every school. There is not a single school in the Province that could not make good use of one bench and a set of simple tools. This plan has been followed with success in Nova Scotia where no rural school is classed as of the highest grade, without it possesses and uses educationally one such bench. Material abounds in the neighborhood of every rural school, that can be effectively used for elementary Manual Training.

In accordance with recommendations made in my last report the Art examinations which had been continued on practically the same syllabus for twenty-five years, were abolished and one substituted for really qualifying Art Specialists which the previous series though professing to do had not done. For the first time the examination in blackboard drawing will consist of actual drawing on the board and the ability to do this, so necessary to every teacher, encouraged. The new syllabus has been received with marked approval by the most expert art and practical authorities in the Province, and it is now reasonably certain that every teacher capable of passing the new examination will be qualified to give efficient instruction in all branches of this subject.

During the year the Art Schools which had previously been under the jurisdiction of Dr. May were placed under my charge. Their condition requires serious attention. The number of such schools has dwindled to three and not one of them can be said to be in a satisfactory state. They are all engaged in a constant struggle to provide the necessary funds to carry on their work efficiently, and their efforts have not met with the success the importance of the subject demands. In connection with these schools there are one or two points to consider: (1) Are the requirements of the Province sufficiently great to need three Art Schools? (2) Would not the work be better done by having one centrally situated, properly equipped and efficiently staffed such school? (3) In any case has not the time come to place these schools in such a position that they will not have to depend for their existence on private effort and subscriptions, which only enable them to live from hand to mouth, and to place them under the regularly constituted educational authorities, putting them on a sound financial basis, generously contributed to by Departmental aid? (4) Should the work in any one town be duplicated as is the case in Toronto with one department of the Technical School and the Art School? These points I beg to present for your earnest consideration.

In previous reports I have pointed out the urgent necessity that exists for the establishing of a system of evening classes especially in the most populous centres of the Province. The old Mechanics' Institutes have entirely disappeared and nothing has been done to fill the place they occupied. According to your reports of 1902 and 1903 these classes have been steadily diminishing and now outside Toronto, Hamilton and Brantford evening classes are practically non-existent except perhaps some few that are carried on by private effort. The success of such classes under the Board of Education, Whitehall, City and Guilds Institute of London and in many places in the United States shows that they have passed the experimental stage and the benefit they are capable of exercising upon art and industry render their inauguration a matter of supreme importance in the development of the trade of this Province. While Agriculture is and probably always will be the staple industry yet the different mechanical trades in wood, metal and other materials are of great importance and education specially designed to assist their intelligent practice is required. Such subjects as Mechanical Drawing, (which is required in every trade) Machine Construction, Architectural Drawing, Mechanics, Chemistry, Electricity, Wood Turning and Metal Work afford channels in which effort might be well directed. The success of the American Correspondence Colleges, which claim a large number of students from Ontario, shows not only that the necessity for such schools exist but also that given the opportunity, it is eagerly made use of. In his report of 1900 Dr. Seath recommended "that a system of evening classes for artisans and others be organized and put in an effective condition. For the actual

mechanic this provision would always be an important one." So far nothing has been done to carry out this recommendation. The organization of such classes should present no insuperable difficulty as with few additions the present staff and equipment of many of the High Schools and Collegiate Institutes could be made effective for this work and the benefits its introduction would confer upon the artisans and mechanics of the Province can scarcely be overestimated.

The only new school opened during the year is one under the control of the Board of Education at Ingersoll. Here an admirable room has been rented, an excellent equipment procured, and the work commenced with much promise of success. A new department, that of "Science and Technology," has been added to the Hamilton School of Art. Manual Training classes aided by the Department are now in active operation as follows:—Dufferin School, Ryerson School, Givens Street School and Wellesley School, Toronto; George Street, Slater Street, Elgin Street, Bolton Street, First Avenue and Cambridge Street, Ottawa; Brockville, Kingston, Brantford, Stratford, London, Woodstock (temporarily closed an account of inability to secure a teacher), Renfrew, Cobourg, Essex, Hamilton, Ingersoll, Guelph, Berlin, Normal Schools, Toronto, London and Ottawa, and Hamilton Normal College. Household Science Classes are carried on in all the Normal Schools and the Normal College, Brantford, Stratford, London, Renfrew, Hamilton, Ingersoll, Guelph, Berlin and Toronto. In connection with these schools the duty has been assigned to me for the past two years of estimating the grant to which they were entitled. These instructions were carried out but I should like to point out that owing to the peculiar condition of affairs no reports on these schools are sent to the Department. In all the Manual Training Schools with one or two exceptions the work is progressing satisfactorily. One or two tendencies should be carefully guarded against.

1. The student should always be the first consideration, the producer and not the product, and while accuracy and finish should always be aimed at, no process should be allowed to be repeated until it becomes automatic, for directly that point is reached all educational value is lost.
2. Ornament should not be allowed to overshadow sound construction. Construction should come first and ornament second. It should not be the purpose to find a place for decoration but to decorate a place already existing or to use the words of Ruskin "It should not be the purpose to construct ornament but to ornament construction." The capacity to appreciate the beauty of unadorned simple construction is in great need of cultivation.
3. The individuality of both teacher and pupil should be allowed as much play as is consistent with correct methods and sound instruction. I have seen time after time in going through the Province exercises being performed, and models being constructed, which had no justification except the fact that the teacher in his own training had worked the same exercises and made the same models. In these cases neither the individuality of the teacher nor that of the scholar had been allowed to grow active. As far as possible the needs and desires of the pupil should be allowed to dictate the work he should do in the Manual Training room, guided always of course by the superior knowledge and greater skill of the teacher.

4. The woodwork or metal work should not be regarded as of greater importance than the "working drawing" but adequate attention should be paid to each. While the drawing generally proves less attractive than the actual construction its educational value is no less and its execution is necessary in order that the actual work of construction may be intelligently done. In place of the working drawing a free hand dimensioned sketch may occasionally be substituted. The practice of rapid free hand sketching is too much neglected and the boy who possesses the ability to rapidly transfer his ideas to paper always has clearer thoughts and is a more desirable workman than one who has not this power.
5. More attention should be paid to simple lettering as the drawings are considerably improved by its use, and in the industrial world lettering is always employed.
6. The decoration of the Manual Training room should also be attended to. There is no reason why this room should look like a barn and there is sufficient material connected with the work to make the room attractive and thus exercise a beneficial and educative influence upon the students.

Considerable progress has been made in the development of Manual Training from the more elementary woodwork to wood-turning and metal work. When every boy entering the Collegiate Institute has had two or three years' training in woodwork it is questionable whether any continuance of this branch offers any educational or utilitarian advantages for him, but the provision of wood-turning or metal work would prove of great benefit. Equipments for wood-turning or metal work and in some cases for both have been installed in Toronto, London, Hamilton, Brantford, Stratford, Kingston and Berlin. The best equipment and accommodation so far provided is that at the last place named where an addition, admirably suited for the purpose, has been made to the Collegiate Institute mainly to provide for these subjects. The work that is being done in the Province is attracting considerable attention and during the year I have received requests for information from England, Ireland, Scotland, United States, New Zealand, South Africa and Australia.

In the provision of purely technical education little has been done. The Agricultural College deals effectively with the needs of Agriculture. The School of Science and the School of Mines touch a class of students not actively engaged in industry and tend to train engineers, foremen, and captains of industry rather than workmen and artisans. The requirements of these latter need to be met by a school of somewhat lower grade. It is doubtful whether there is yet room for more than one good school of this class. The mistake of frittering away our energies on three or four insufficiently staffed and poorly equipped schools ought not to be repeated in schools of this kind as has been done in the case of the Art schools already referred to. In 1900 Dr. Seath wrote "A separate Technical School I do not believe feasible at present in any other place than Toronto. In its Technical School * * we have the potentiality of a first rate institution. With a wing added for more teaching class rooms, 'shops' and an assembly hall, a completed equipment and efficient staff and one or two additions to the courses we should have at a cost easily within the capacity of the municipality a technical

school inferior to few in the United States." These words still adequately describe the situation and notwithstanding the re-organization of the Toronto school system little has been done to carry out the recommendations there made. The provision of "shops" and a "completed equipment" seem as far off to-day as when the report was made. When we see what has been and is being done in England, and the United States, and in less wealthy countries on the continent of Europe such as Switzerland, still the wonder grows that a Province as wealthy and progressive as Ontario lags far behind in this provision. There is a tendency to spend more than is necessary on elaborate buildings and equipments beyond what is actually required. This tendency is most marked in some of the institutions in the United States but is a fault with which our severest critics cannot reproach us. The Central Higher Grade School, Leeds (England), and the Central-Manual Training School, Philadelphia, are two schools which are generally free from this criticism. All needful equipment is provided but everything is for use and nothing that does not serve a definite purpose in the everyday life of the school is admitted. These two schools afford good examples of the kind we need. In the Central Higher Grade School accommodation was originally provided for about 2,639 scholars but the provision of various laboratories and lecture theatres has considerably reduced the number of school places. At the end of the last school year—the twelfth in the history of the new building—the number of pupils on the roll was 1,749. The late Lord Playfair described it as "the finest and best-equipped school in this or in any country." The gymnasium has been fitted with a great variety of apparatus affording every gradation of exercise for students of both sexes and the greatest care is taken to prevent overstrain or accident, all the exercises being conducted under the personal supervision of a thoroughly qualified instructor and in the presence and with the assistance of the class teacher. Commodious workshops have been erected and equipments both for wood and metal working provided so that boys intending to become engineers, electricians, general metal or wood workers may receive an elementary training having some connection with their future occupation. There are six teachers engaged solely in this division of the school. Large laboratories for elementary and advanced work in physics, chemistry, cookery, needlework and dressmaking also form part of the school's equipment. The organization of every part seems almost perfect. On the occasion of my visit twenty-four boys were at work in the metal work room. They were divided as follows: eight forging, eight bench work, four turning and four brazing and soldering. In this way a small equipment was made to serve very effectively a large number of pupils. The excellent equipment the school possesses is also made use of for an effective scheme of evening classes. The school is arranged in two divisions (1) Preparatory or Elementary Section. (2) Secondary Section. In the Senior division of the elementary section the subjects are Scripture, English, Writing, Dictation, Arithmetic, Grammar, Composition, Geography, History, Elementary Mathematics, Elementary Latin, French, Drawing, Gymnastics, Manual Instruction, Music, Science, Needlework, Cookery, and Domestic Science for girls. The second year's work of the elementary course is as follows:—

English.—A period of English history; a period of English literature; study of an English classic.

Latin.—Latin grammar and composition; First reader; Gradatim.

Mathematics.—Algebra; Euclid; Plane Trigonometry.

French. Grammar; Repetition of easy poems; Jules Vrene, *Le tour du monde en 80 jours*; Labiche et Martin, *La Poudre aux yeuz*.

German.—Grammar, easy translation.

Science.—Practical Plane and Solid Geometry; Inorganic Chemistry (Theoretical and Practical); Physics (Theoretical and Practical).

Drawing.—Freehand; Linear Perspective; Model; Elementary Shading.

Commerical.—Business Methods; Shorthand; Geography (Europe and India).

Manual Instruction.—Woodwork and Metal work.

Gymnastics.

The secondary section is intended to occupy four years and is divided into Elementary and Advanced, each taking two years. The fourth year of the Advanced Course is as follows:—

English.—History of the English Language; Modern Literature and History.

Latin.—Latin Grammar and Composition; Virgil, *Æneid*, Bk. 1; Cæsar, *De Bello Gallico*, Bk. V.; Extracts from Ovid and Livy.

French.—Grammar and Composition; Conversation; Alfred de Musset, *On ne saurait penser à tout*; Michelet, *Récit d'histoire de France*; Lazare, *Half hours with modern French Authors*; Kron's *French Daily Life*.

Mathematics.—Algebra, Euclid, Trigonometry; Co-ordinate Geometry.

German.—Grammar; Conversation; Ferdinand Goebel, *Rübezahl*.

Science.—Practical Plane and Solid Geometry; Heat (Theoretical and Experimental); General Physics; Organic and Inorganic Chemistry (Theoretical and Practical).

Commercial and General Geography.

Art.—Mechanical Drawing; Drawing and shading from objects and casts.

Manual Instruction.—Woodwork and Metal Work.

Gymnastics.

The Central Manual Training School, Philadelphia, is of much the same character. Manual Training as given in many of the schools in the United States goes beyond what is understood elsewhere as Manual Training, and becomes very largely technical. The purpose of this school is stated to be "to bring thought and labour together to make the thinker a worker and the worker a thinker," and judging from what I saw and the eighteen years' work of the school this purpose seems to have been carried out. Besides the Principal, the staff of the school consists of 26 teachers. It is divided into five departments: literature, mathematics, science, drawing and

manual training and equal attention is given to both the academic and practical sides. The equipment of the Manual Training Departments is as follows:—

WOOD WORK (*First Year*).

Fifty cabinet maker's benches with sets of tools for each bench; two grindstones; two glue pots.

WOOD WORK (*Second Year*).

Twenty-four cabinet maker's benches, each with its full set of tools; twenty-four wood lathes; one grindstone, one glue pot.

METAL WORK (*First Year*).

Twenty-five vises with set of tools for each vise; one grindstone; one surface plate; six troughs for moulding; furnaces, trowels, sieves, flasks, etc., for foundry work, soldering irons, heaters, stakes, etc., for tinsmithing.

METAL WORK (*Second Year*).

Twenty-four forges, twenty-four anvils, each supplied with a set of tools; two light drill presses; one grindstone.

MECHANICAL CONSTRUCTION (*Third Year*).

Eight engine lathes; two hand lathes; one planer; one shaper; one drill press; six vises; one brazing apparatus; one emery grinding machine; three large surface plates; one screw press (the last three made by the students). Power is furnished by a sixty horse-power Corliss engine, with a seventy horse-power boiler; one Thompson-Houston dynamo thirteen kilowatts, and one multipolar dynamo, seventeen kilowatts. The examination for admission to this school is open to pupils who have gone through all the grades of the Public Schools.

A very gratifying feature of the year's work has been the development of the Manual Arts in the various Normal Schools and the Normal College. The equipment is, generally speaking, adequate though one or two additions might well be made. The courses include wood work, paper and cardboard work, basketry, metal work, modelling and glass work and at the end of the year's training each student may reasonably be expected to have such a practical knowledge of various materials and their general application to educational purposes, as will materially add to his or her efficiency as a teacher. The limited time during which the students attend the model school prevents, at present, the inclusion of training in the manual arts. When this instruction is given here all our institutions having to do with the training of teachers will be taking part in this work.

Steps were taken at the last meeting of the Ontario Educational Association to form a section to be devoted to these subjects, and the programme organized for the next conference promises to be a very interesting one.

Previous to the issue in August last of the revised regulations, grants were not paid on equipments which had been presented to the various School Boards. This restriction has now been removed and in future grants will be paid on thirteen such equipments.

The attention of Educational authorities requires to be drawn to Regulation 150 particularly sections 5 and 6.

I have the honour to be,

Your obedient servant,

ALBERT H. LEAKE.

Toronto, 8th February, 1905.

APPENDIX L.—Statistics of

Name of Model School.	Name of Principal.	Certificate of Principal.	Salary of Principal.	Year of appointment.	Time Principal devotes to Model School work daily during the term.	No. of Assistants with 1st class certificates.	No. with 2nd class.
1 Athens	C. R. MacIntosh	I	\$ 800	1901	All day		4
2 Barrie	W. J. Hallet	I	900	1893	"	1	1
3 Beamsville	W. M. Mitchell	I	600	1903	"		4
4 Berlin	J. Suddaby	I	1,150	1877	"	1	2
5 Bracebridge	Wm. Rennie	I	6280	1902	"	1	6
6 Bradford	A. N. Searrow	I	750	1902	"		2
7 Brampton	Jas. A. Underhill	I	850	1903	"		2
8 Caledonia	John B. Widdis	I	675	1902	"		1
9 Chatham	J. W. Plewes	I	1,200	1900	"		1
10 Clinton	W. R. Lough	I	900	1884	"		1
11 Cornwall	S. J. Keys, B.A.	I	1,000	1902	"		1
12 Durham	Thos. Allan	I	750	1888	"	2 B.A.'s	4
13 Elora	David T. Wright	I	700	1903	"	1	1
14 Forest	James Campbell	I	800	1894	"		1
15 Gananoque	J. C. Linklater	I	1,000	1888	"	1	3
16 Goderich	Jas. H. Tigert	I	800	1902	"	3	2
17 Hamilton	John B. Robinson, B.A.	I	1,025	1902	"	3	2
18 Ingersoll	H. F. McDiarmid	I	1,000	1885	"	2	10
19 Kincardine	W. B. Beer	I	800	1903	"		1
20 Kingston	R. F. Greenlees	I	800	1902	"	4	8
21 Lindsay	G. E. Broderick	I	1,200	1888	"	2	1
22 London	Geo. B. Kirk	I	1,200	1900	"	1	9
23 Madoc	T. C. Tice	I	850	1897	"		5
24 Meaford	M. N. Clark, B.A.	I	850	1899	"		4
25 Milton	W. F. Inman	I	780	1893	"	1	4
26 Minden	Wm. Thos. Arthurs	II	500	1904	"		1
27 Mitchell	J. H. W. McRoberts	I	800	1899	"	2	4
28 Morrisburg	Clarence D. Bouck	I	600	1904	"	1	2
29 Mount Forest	G. R. Theobald	I	900	1900	5 hours		2
30 Napance	C. H. Edwards, B.A.	I	1,000	1899	All day	1 B.A.	6
31 Newmarket	J. F. Harvey, B.A.	I	750	1903	"	2	4
32 Norwood	R. H. Leighton	I	600	1902	"		2
33 Orangeville	M. N. Armstrong	I	800	1885	"		9
34 Owen Sound	T. A. Reid	I	1,100	1894	"		9
35 Parry Sound	A. M. Currie	I	900	1896	"	2	4
36 Perth	M. M. Jaques	I	1,000	1884	"		3
37 Picton	S. C. Woodworth	I	800	1901	"	1	3
38 Port Arthur	W. A. Stickle	I	1,050	1903	"	1	10
39 Port Hope	A. A. Jordan	I	1,100	1903	"		14
40 Port Perry	R. F. Downey	I	800	1902	All except hour	2	4
41 Prescott	H. W. Kerfoot, B.A.	I	950	1903	All day		7
42 Rat Portage	J. W. Forhan	I	1,000	1903	"	2	8
43 Renfrew	John Flower	I	700	1904	"		9
44 St. Thomas	Chas. Silcox, B.A., D. Paed.	I	1,200	1899	"		11
45 Sault Ste. Marie	John M. Kaine	I	1,000	1904	"		10
46 Sarnia	A. Wark	I	1,000	1877	"		8
47 Simcoe	I. S. Rowat	I	800	1889	"	2	3
48 Stratford	G. Russell Stuart	I	1,200	1887	"	2	23
49 Strathroy	Thos. Dunsmore	I	850	1882	"		4
50 Toronto	W. E. Groves	I	1,550	1895	"	1	1
51 Toronto Junction	Wm. Wilson	I	1,100	1889	"		10
52 Vankleeckhill	Samuel A. Hitsman	I	700	1904	"		13
53 Walkerton	W. R. Manning	I	850	1902	"	2	7
54 Welland	David Hicks, B.A.	I	600	1903	"	1	3
55 Whitby	J. A. Brown	I	950	1877	"	1	12
56 Windsor	David M. Eagle	I	1,100	1901	"	1	3
57 Woodstock	S. Nethercott	I	1,000	1893	"		21
Totals	8 University graduates	56 I 1 II	\$904			30	438

a For the term.

b Inspector of Public Schools.

c Average annual salary.

County Model Schqols, 1904.

No. with 3rd class.	No. with other class.	Time assistant relieved Principal from Public School work daily.	Is separate room provided?	No. of volumes in professional library.	Government grant.	Municipal grant.	Fees.	No. of divisions in school or schools.	No. of divisions used for Model School purposes.	No. of students sent at one time to observe.	No. of students sent at one time to teach.	Length of time students are trained before being sent to the divisions to observe.	Length of time students are trained before being sent to the divisions to teach.
1		All day	Yes	140	\$ 150	\$ 150	\$ 155	4	4	7 or 8	7 or 8	4 weeks	6 weeks
2		All day		146	150	150	215	8	8	5 or 6	5 or 6	6 "	6 "
3		All day		164	150	150	80	4	4	5 or 6	5 or 6	6 "	6 "
4		"		150	300	300	110	9	9	7 or 8	7 or 8	6 "	6 "
5	12	"		150	300		70	12	8	2	2	6 "	7 "
6	1	All day		131	150	150	160	4	4	4	4	6 "	7 "
7		"		138	150	250	65	9	7	3 or 4	3 or 4	6 "	7 "
8		"		140	150	150	85	4	4	4 or 5	4 or 5	7 "	7 "
9		"		408	150	150	160	18	18	3 or 4	3 or 4	4 "	6 "
10	1	"		146	150	150	175	7	7	5	5	6 "	6 "
11		"		250	150	150	175	12	12	3	3	4 "	6 "
12	1	"		110	150	150	150	8	5	3	3	4 "	8 "
13		"		147	150	150	110	5	5	4 or 5	4 or 5	6 "	6 "
14		"		120	150	150	80	6	6	3	3	6 "	6 "
15	3	"		155	150	150	20	12	6	2	2	6 "	7 "
16	1	"		138	150	150	145	11	10	4	4	5 1/2 "	5 1/2 "
17	1	"		264	150	150	115	10	9	1 or 2	1 or 2	7 "	7 "
18		"		146	150	200	45	13	10	3	3	5 "	6 "
19		"		144	150	150	105	7	7	3	3	6 "	6 "
20		"		202	150	150	80	50	45	2 or 3	2 or 3	6 "	6 "
21		All day		250	150	150	75	20	14	1	1	5 "	7 "
22		"		116	150	69	140	10	10	3	3	4 "	5 "
23		"		250	150	250	115	6	6	3 or 4	3 or 4	5 "	5 "
24	2	"		139	150	150	70	9	7	4	4	6 "	6 "
25	2	"		139	150	200	65	7	5	3 or 4	3 or 4	6 "	6 "
26		"		205	150	150	42	2	2	4	4	8 "	9 "
27		All day		146	150	150	45	7	7	2 or 3	2 or 3	6 "	6 "
28	1	"		148	150	150	115	7	7	4	4	6 "	6 "
29		5 hours		150	150	150	95	8	8	2 or 3	2 or 3	5 "	5 "
30	1	2		200	150	150	140	10	9	3 or 4	3 or 4	5 "	5 "
31		All day		161	150	175	105	7	7	3	3	7 "	8 "
32		"		125	150	150	100	5	5	4	4	5 "	7 "
33	1	"		144	150	150	45	10	7	3	3	7 "	7 "
34	2	"		289	150	150	115	12	11	3	3	8 "	8 "
35	5	All day		143	300		75	13	5	3	3	6 "	6 "
36	2	"		160	150	150	25	10	10	4	4	7 "	7 "
37	2	"		200	150	150	60	10	8	2	2	6 "	7 "
38		"						12	12	1	1	5 "	6 "
39	1	"		175	150	300	145	15	13	2 or 3	2 or 3	6 "	6 "
40	1	"		148	150	150	120	6	6	4	4	6 "	6 "
41		"		181	150	150	95	7	7	2 or 3	2 or 3	6 "	6 "
42	1	"		60	300			12	10	3	3	6 "	6 "
43		"		137	150	150	140	8	8	3 or 4	3 or 4	5 "	6 "
44		"		161	150	150	195	11	11	5	5	6 "	6 "
45		All day		60	300		50	10	10	2	2	6 "	6 "
46		"		141	150	150	110	9	8	3	3	6 "	6 "
47		All day		193	150	150	75	7	7	2 or 3	2 or 3	6 "	7 "
48	1	"		400	150	150	120	26	21	3	3	6 "	6 "
49		All day		152	150	150	65	9	9	1 or 2	1 or 2	6 "	6 "
50		"		261	150	150	105	12	11	21	2	6 "	6 "
51		"		125	150	150	60	11	11	3	3	6 "	7 "
52		"		186	150	150	125	4	4	6 or 7	6 or 7	3 "	7 "
53		"		147	150	150	120	9	9	3	3	2 "	6 "
54	1	"		75	150	150	65	5	5	3	3	4 "	4 "
55	3	"		174	150	150	50	7	7	4	4	6 "	6 "
56		"		143	150	150	140	14	14	2 or 3	2 or 3	5 "	6 "
57	2	1		274	150	150	100	30	20	2	2	6 "	8 "
34	9			9,542	9,150	8,344	5,607						

APPENDIX L.—Statistics of County

Name of Model School.	Number of weeks students teach in the divisions.	Number of hours per day.	Number of classes in the divisions used for Model School purposes.	Average number of lessons taught by each student during the term.	Average number of lessons each class will be taught by all the students during the term.	Average length of such lessons.	Time students remain in a division before passing to another.
1 Athens	7	1 to 1 1/4	11	20	56	20 min.	1 week.
2 Barrie	8	1 1/2 to 1 3/4	20	15	32	15 "	1 "
3 Beamsville	7	1 to 1 1/4	11	16	23	20 "	1 "
4 Berlin	6	1 3/4	14	15	23	20 "	1 "
5 Bracebridge	5	1	8	20	35	20 "	1 "
6 Bradford	6	1 1/2	10	16	51	20 "	4 days.
7 Brampton	6	1 to 1 1/2	15	20	20	20 "	4 "
8 Caledonia	6	1 1/2 to 2	7	21	51	25 "	1 week.
9 Chatham	6	1 1/2	24	22	30	20 "	1 "
10 Clinton	5	1 1/2	16	20	22	18 "	3 to 4 days.
11 Cornwall	5	1 1/2	24	21	30	15 "	2 days.
12 Durham	4	1	12	20	15	20 "	2 "
13 Elora	7	1 to 1 1/4	12	20	37	20 "	3 "
14 Forest	6	1 1/2	16	18	18	20 "	1 week.
15 Gananoque	3 days in each of 6	1 1/2	14	24	7	20 "	1 "
16 Goderich	5	1 1/2	25	21	24	20 "	4 days.
17 Hamilton	7	1 1/2	140	21	3	25 "	1 week.
18 Ingersoll	5	1 1/2	14	16	10	22 "	1 "
19 Kincardine	6	1 1/2	23	22	20	20 "	1 "
20 Kingston	7	1	45	23	8	20 "	4 days.
21 Lindsay	5	1 1/2	38	20	8	22 1/2 "	2 "
22 London	6	1	10	20	56	20 "	2 "
23 Madoc	7	1 1/2	15	20	30	15 "	1 week.
24 Meaford	6	1 1/2	11	18	23	20 "	2 days.
25 Milton	6	1	18	20	14	20 "	1 week.
26 Minden	4	1	10	17	12	20 "	1 "
27 Mitchell	7	1 1/2	10	24	22	20 "	4 days.
28 Morrisburg	6	1 1/2	18	20	31	25 "	1 week.
29 Mount Forest	6	1 1/2	17	22	26	20 "	2 or 3 days.
30 Napanee	6	1 1/2	14	25	56	25 "	1 week.
31 Newmarket	5	1 1/2	19	24	26	25 "	1 "
32 Norwood	3	1	11	14	25	20 "	2 days.
33 Orangeville	7	1	14	21	13	20 "	1 week.
34 Owen Sound	4	1 1/2	14	20	33	20 "	2 days.
35 Parry Sound	6	1 except Monday	8	23	43	20 "	1 week.
36 Perth	7	1 1/2	20	21	32	20 "	1 "
37 Picton	3	1 1/2	11	20	22	20 "	3 days.
38 Port Arthur	6	1 1/2	22	30	7	20 "	1 week.
39 Port Hope	6	1 1/2 to 2 1/2	20	18	26	20 "	1 "
40 Port Perry	6	1 1/2	12	24	48	25 "	1 "
41 Prescott	7	1 1/2 (3 days per week)	14	20	27	20 "	1 "
42 Rat Portage	6	1 1/2	20	29	6	20 "	1 "
43 Renfrew	8	1 1/2	17	16	26	20 "	2 days.
44 St. Thomas	6	1 1/2	12	20	65	20 "	4 "
45 Sault Ste. Marie	6	1 1/2	8	19	24	20 "	4 "
46 Sarnia	8	1 1/2	21	24	22	17 "	4 "
47 Simcoe	4	1 1/2	12	20	25	20 "	3 "
48 Stratford	6	1 1/2	58	25	10	20 "	1 week.
49 Strathroy	6	1 1/2	27	27	12	20 "	3 to 4 days.
50 Toronto	5	3/4 to 1	13	20	32	25 "	1 day.
51 Toronto Junction	6	1	14	18	15	20 "	3 days.
52 Vankleekhill	5	2 1/2 (4 days per week)	11	20	45	15 "	1 week.
53 Walkerton	7	a 2 1/2	15	16	26	20 "	3 days.
54 Welland	8	1 1/2	5	17	44	30 "	4 days.
55 Whitby	6	1 1/2	17	29	17	20 "	4 days.
56 Windsor	7	1	19	20	29	20 "	1 week.
57 Woodstock	5	1 to 1 1/2	20	20	20	40 "	4 days.
Totals							

a Observing and teaching.

Model Schools, 1904.—*Concluded.*

Number of students on roll.	Number who passed the final examination.					Number with Senior Leaving standing.	Number with Junior Leaving standing.	Number with District Certificate standing.	Allowance made by trustees to Principal's Assistant.	Number of renewals granted by the Board.	Average age of students.
	Male.	Female.	Male.	Female.	Total.						
1	31	7	24	7	24	31	25	4	135	7	18.22 years.
2	26	8	18	7	18	25	18	4	150	1	19.5
3	16	1	15	1	15	16	12	4	150	7	19.4
4	22	8	14	8	14	22	16	6	280	5	19
5	14	1	14	1	13	13	1	13	135	16	18.66
6	32	6	26	6	26	32	20	11	125	1	18.75
7	15	4	13	4	13	15	8	5	125	1	19
8	17	4	13	4	13	17	17	1	200	3	18.66
9	32	15	17	15	17	32	26	3	120	20	19
10	35	10	25	10	25	35	29	1	150	2	18.9
11	9	1	8	1	8	9	7	1	175	13	19
12	22	3	19	3	18	21	19	3	140	6	18.5
13	16	7	9	7	9	16	16	1	140	1	18
14	4	1	3	1	3	4	4	1	175	1	18.5
15											
16	29	11	18	11	18	29	27	1	150	10	18.5
17	23	5	18	5	18	23	19	3	125	5	18.7
18	9	3	6	3	6	9	5	1	150	2	19
19	21	4	17	4	17	21	19	2	150	9	19
20	16	3	13	3	13	16	15	1	150	14	19.6
21	15	6	9	5	9	14	15	1	150	6	19.4
22	28	4	24	3	23	26	27	1	250	1	19
23	23	7	16	7	16	23	10	11	150	17	18.5
24	14	6	8	6	8	14	10	3	175	10	18.4
25	13	3	10	3	10	13	9	3	150	4	18
26	7	2	5	2	5	7	8	1	150	1	19.25
27	9	2	7	2	7	9	1	1	150	5	20
28	28	13	15	13	14	27	22	5	125	16	19.5
29	20	7	13	7	13	20	14	1	150	7	18.5
30	28	8	20	8	19	27	21	3	130	15	19
31	21	6	15	6	14	20	18	2	125	10	18.75
32	20	7	13	6	13	19	7	12	150	18	18
33	9	3	6	3	6	9	9	1	140	7	18.5
34	23	7	16	7	16	23	15	5	220	1	18
35	15	15	14	14	14	14	1	14	150	13	19
36	31	9	22	9	21	30	30	1	180	12	19
37	12	3	9	3	9	12	7	4	150	18	19
38	5	1	4	1	4	5	5	1	140	7	18.5
39	29	11	18	11	18	29	25	7	220	2	18
40	24	5	19	4	19	23	16	7	150	13	18.8
41	19	8	11	6	11	17	14	4	200	12	19
42	4	4	4	4	4	4	1	2	125	22	18.5
43	28	2	26	2	26	28	10	17	150	14	18.3
44	39	7	32	7	32	39	31	1	160	2	19
45	10	10	10	9	9	9	1	9	160	1	19
46	22	4	18	4	17	21	15	4	160	5	18.5
47	15	7	8	7	6	13	13	1	175	1	18.76
48	22	3	19	3	19	22	2	20	150	8	19
49	12	5	7	5	7	12	11	1	150	9	19
50	21	1	20	1	20	21	18	1	150	1	18
51	12	3	9	3	9	12	10	1	150	1	18
52	25	11	14	11	14	25	18	7	175	8	18.9
53	24	16	8	16	8	24	22	1	150	10	18.46
54	13	1	12	1	9	10	9	2	150	1	19
55	10	2	8	2	8	10	5	4	130	1	19
56	28	2	26	2	25	27	4	19	180	9	18.92
57	20	2	18	2	17	19	1	19	180	8	18.9
1.122	195	827	287	810	1.097	91	827	204	374	18.77 years.	

APPENDIX M.—PROVINCIAL NORMAL AND MODEL SCHOOLS, ONTARIO NORMAL COLLEGE.

I. PROVINCIAL NORMAL AND MODEL SCHOOLS, TORONTO.

1. Staff of Toronto Normal School.

Wm. Scott, B.A.	Principal.
W. H. Elliott, B.A.	Vice-Principal.
A. C. Casselman	Drawing Master.
A. T. Cringan	Music Master.
Jas. H. Wilkinson.	Instructor in Manual Training.
Miss Nina A. Ewing	Instructor in Household Economics.
Miss Mary E. Macintyre	Instructor in Kindergarten Principles.
Wm. Oldright, M.D.	Instructor in Hygiene.
Mrs. Jean Somers	Instructor in Calisthenics.
Mrs. Emma Macbeth	Instructor in Needle Work.
Sergeant-Major D. Borland	Instructor in Drill.

Students Admitted, Session 1904-5.

Male	3
Female	139
Total	142

2. Staff of the Provincial Model School, Toronto.

Angus McIntosh	Head Master.
Miss M. Meehan	First Female Assistant.
R. W. Murray	First Male Assistant.
" K. Caulfeild	Assistant.
Miss A. F. Laven	Assistant.
Thomas M. Porter	Assistant.
Milton A. Sorsoleil	Assistant.
Miss F. M. Taylor	Assistant.
Miss A. E. G. Wilson	Assistant.
Miss Hope Merritt	Assistant.
A. C. Casselman	Drawing Master.
A. T. Cringan	Music Master.
Miss Mary E. Macintyre	Kindergarten Directress.
Miss Ellen Cody	Kindergarten Assistant.
Mrs. Jean Somers	Instructor in Calisthenics.
Mrs. Emma Macbeth	Instructor in Needle Work.
Sergeant-Major D. Borland	Drill Master.
Eugene Masson	French Master.
Jas. H. Wilkinson	Instructor in Manual Training.
Miss Nina A. Ewing	Instructor in Household Economics.

Number of pupils in 1904	525
Number of Kindergarten pupils in 1904	61

II. PROVINCIAL NORMAL AND MODEL SCHOOLS, OTTAWA

1. Staff of Ottawa Normal School.

James F. White	Principal.
S. B. Sinclair, M.A., Ph. D.	Vice Principal.
J. A. Dobbie	Drawing and Writing Master.
T. A. Brown	Music Master.
Miss E. H. Keyes, B.E.	Instructor in Elocution and Physical Culture.
Miss Eliza Bolton	Lecturer on Kindergarten Principles.
Miss B. Livingstone.	Lecturer on Domestic Science.
J. S. Harterre	Instructor in Manual Training.

Students Admitted, Session 1904-5.

Male	9
Female	66
Total	75

2. Staff of Provincial Model School, Ottawa.

J. H. Putman, B.A.	Head Master.
J. F. Sullivan	First Assistant.
F. A. Jones	Second Assistant.
Miss Jennie Hilliard	Third Assistant.
Miss M. E. Butterworth	First Female Assistant.
Miss Evelyn Weir	Second Female Assistant.
Miss A. G. Hanahoe	Third Female Assistant.
Miss J. Foster	Fourth Female Assistant.
Miss Eliza Bolton	Kindergarten Directress.
Miss A. Baker	Kindergarten Assistant.
J. A. Dobbie	Drawing and Writing Master.
T. A. Brown	Music Master.
Miss E. H. Keyes B.E.	Teacher of Physical Culture.
Miss B. Livingstone	Teacher of Domestic Science.
J. Fleury	French Teacher.
J. S. Harterre	Manual Training Instructor.

Number of pupils, 1904 334

Number of Kindergarten pupils, 1904 62

III. PROVINCIAL NORMAL SCHOOL, LONDON.

Staff of London Normal School.

F. W. Merchant, M.A., D.Pæd.	Principal.
John Dearness, M.A.	Vice-Principal.
S. K. Davidson	Drawing Master.
Fred. L. Evans	Music Master.
Miss Agnes Mackenzie	Teacher of Kindergarten Principles.
Sugden Pickles	Manual Training Instructor.

Students Admitted, Session 1904-5.

Male	10
Female	77
Total	87

IV. ONTARIO NORMAL COLLEGE.

Officers:

J. A. McLellan, M.A., LL.D., Principal.

R. A. Thompson, B.A., Vice-Principal.

Faculty:

J. A. McLellan, M.A., LL.D.	Professor of Education.
R. A. Thompson, B.A.	Lecturer on School Management.
J. B. Turner, B.A.	Lecturer on Methods in Chemistry, Botany and Zoology.
J. T. Crawford, B.A.	Lecturer on Methods in Mathematics.
W. M. Logan, M.A.	Lecturer on Methods in Classics.
E. S. Hogarth, B.A.	Lecturer on Methods in Modern Languages.
F. F. Macpherson, B.A.	Lecturer on Methods in Literature and Composition.
S. A. Morgan, B.A., D.Pæd.	Lecturer on Methods in English Grammar and Rhetoric.
A. Patterson, M.A.	Lecturer on Methods in History and Geography.
J. Gill, B.A., B.Pæd.	Lecturer on Methods in Physics.
Agnes Knox-Black	Lecturer on Reading and Elocution.
J. C. McCabe, M.D.	Lecturer on School Hygiene and Sanitation.
G. L. Johnston, B.A.	Lecturer on Writing and Drawing.
M. C. Macpherson, B.A.	Domestic Science Instructor.
W. Bailey	Manual Training Instructor.
J. Johnson	Music.
T. E. Parkhill, Sergt.	Drill, Gymnastics and Calisthenics.

Students Admitted, Session 1904-5.

Male	45
Female	121
Total	166

APPENDIX N.—HIGH SCHOOL CADET CORPS, 1904.

Name of School.	Number of Officers, N. C. Officers and boys in the Corps.	Drill.	Remarks of Militia Officers on the efficiency of the corps.
Arthur	48	Fair	Satisfactory.
Barrie	63	Good	Satisfactory.
Brantford	33	Very good ...	Satisfactory.
Chatham	43	Very good ...	Satisfactory.
Cobourg	41	Very good ...	Satisfactory.
Collingwood ..	41	Fair	Satisfactory.
Dundas	28	Fair	Satisfactory.
Dunnville	23	Good	Satisfactory.
Galt	35	Very good ...	Satisfactory.
Guelph	57	Excellent ...	Very satisfactory.
Hamilton	37	Very good ...	Satisfactory.
Lindsay	42	Good	Satisfactory.
Markham	39	Good	Satisfactory.
Morrisburg	42	Good	Found this company superior to expectations, and strongly recommend that every encouragement possible be given them.
Mount Forest..	40	Very good ...	Satisfactory.
Napanee	42	Very good ...	Satisfactory.
Newmarket....	26	Fair	Fair only.
Niagara Falls ..	24	Fair	Satisfactory.
Norwood	27	Good	Satisfactory.
Orillia	42	Fair	Satisfactory.
Ottawa	38	Very good ...	This is an excellent company, clothed in khaki uniform. They are very smart and well drilled and their instructor, Lieut. B. S. Simpson, has taken great pains with their training and deserves much credit for their present creditable condition.
Owen Sound....	45	Very good ...	Very satisfactory.
Peterborough ..	38	Excellent ...	Very satisfactory.
Port Perry	31	Good	Satisfactory.
St. Catharines..	43	Very good ...	Very satisfactory.
St. Thomas	55	Excellent ...	The corps is undoubtedly the best drilled and disciplined in the District, and reflects great credit on the instructor and the boys themselves.
Sarnia	50	Good	This corps... made an excellent showing. By next year I am quite sure it will be one of the best in the District. Their shooting for the "Beck Shield" compared most favorably.
Seaforth	34	Good	Satisfactory.
Strathroy	40	Very good ...	Not satisfactory owing to the absence of officers.
Toronto—			
Harbord	39	Very good ...	Very satisfactory.
Jameson	28	Very good ...	Very satisfactory.
Jarvis	49	Very good ...	Very satisfactory.
Uxbridge	31	Good	Satisfactory.
Vankleekhill ..	39	Good	Satisfactory.
Woodstock	59	Very good ...	Very satisfactory.
Total	1,392		
	35 corps.		

APPENDIX O.—*SUPERANNUATED TEACHERS.*

(Continued from Report of 1903.)

*1. ALLOWANCES GRANTED DURING 1904.

Register number.	Name.	Age.	Post Office.	Years of service.	Allow- ance.
					\$ c.
1123	Moore, Thomas T.....	64	Acton.....	41½	284 00
1124	Davis, James Alfred.....	60	Mount Albion.....	24	166 00
1125	Bell, Wm.....	61	Ailsa Craig.....	36½	255 50
1126	Latter, Joseph.....	58	Doncaster.....	34	238 00
1127	Hanson, Mary E. F.....	53	London.....	33	231 00
1128	Connor, James Wm.....	61	Berlin.....	40	280 00
1129	Bell, David.....	53	Rockton.....	18	126 00
1130	Rabb, John.....	53	Lombardy.....	31½	109 75
1131	Wilkins, Miss Eliz. A.....	60	St. Catharines.....	40½	243 00
1132	Dafoe, John W.....	67	Belleville.....	41	281 00
1133	Morgan, James W.....	52	Port Arthur.....	34	238 00
1134	Weatherston, Miss Mary....	57	Toronto.....	23	161 00
1135	Goodbody, Wm.....	65	Gananoque.....	31	186 00
1136	†Wadsworth, James J.....	63	Simcoe.....	40½	283 50
1137	†Mackenzie, Wm. F.....	60	Marden.....	41	280 00

2. SUMMARY FOR YEARS 1882-1904.

Year.	Number of teachers on list.	Expenditure for the year.	Gross contributions to the fund.	Amount refunded to teachers.
		\$ c.	\$ c.	\$ c.
1882.....	422	51,000 00	13,501 08	3,660 10
1887.....	454	58,295 33	1,489 00	3,815 80
1892.....	456	63,750 00	1,313 50	788 86
1897.....	424	62,800 33	847 00	620 27
1902.....	407	64,244 92	1,073 50	722 78
1903.....	398	63,267 43	996 00	470 25
1904.....	392	64,259 75	934 75	987 48

Ten teachers' subscriptions were withdrawn from the fund during 1904.

*As the sum of \$4 is deducted from each Superannuated Teacher's allowance, as subscription to the fund, the payments were \$4 less in each case than given in this list.

†Allowance commences with 1905.

APPENDIX P.—ANNUAL REPORT OF SCHOOL OF PRACTICAL SCIENCE.

To the HON. R. A. PYNE, M.D., M.P.P.,
Minister of Education.

SIR,—I have the honour to submit the annual report of the School of Practical Science for the year 1904.

The calendar year not being conterminous with the academic year, this report will cover the second term of the academic year, 1903-04, and the first term of the academic year, 1904-05, except when otherwise stated.

The number of students in attendance was as follows:

In the Regular Departments.	2nd Term. Session 1903-04.	1st Term. Session 1904-05.
I. year.....	179	208
II. year.....	102	144
III. year.....	84	76
IV. year.....	20	47
Occasional.....	4	5
	389	480

The fees for the academic year 1903-04 were \$28,522.

Of the above amount, \$2,053 were paid to the Bursar of the University of Toronto for instruction in Mathematics and Biology, under the authority of an Order-in-Council, dated February 3rd, 1904; \$1,431.40 to the Examiners of the School for the Session 1903-04, under the authority of an Order-in-Council, dated February 3rd, 1899, and the remainder, \$25,037.60, to the Honourable the Provincial Treasurer.

The number of regular students who presented themselves for examination at the annual examinations of the academic year 1903-04 was three hundred and fifty-five. Of these two hundred and sixty-four passed.

The number of candidates who graduated was seventy. The total number of graduates to date is four hundred and seventy.

The following statement shows the geographical distribution of the graduates now living:

	Number.	Percentage.
Canada.....	339	75
United States.....	105	23
Other Countries.....	11	2
	455	100

The number of graduates who proceeded to the degree of B. A. Sc. at the University examinations of 1904, was twenty. The total number of graduates who have received the degree of B. A. Sc. is one hundred and forty-seven.

Eighteen graduates have received the degree of C. E., two the degree of M. E. (Mining Engineer), three the degree of M. E. (Mechanical Engineer), and two the degree of E. E. in the University of Toronto.

The regular departments of instruction are:

1. Civil Engineering.
2. Mining Engineering.
3. Mechanical and Electrical Engineering.
4. Architecture.
5. Analytical and Applied Chemistry.
6. Chemical Engineering.

The following statement shows the courses of lectures and practical instruction, the instructors, and the number of students taking the various courses:

SUBJECTS TAUGHT BY THE FACULTY OF THE SCHOOL OF SCIENCE.

Subjects.	Instructors.	Number of Students.	
		2nd Term, Session 1903-04.	1st Term, Session 1904-05.
Organic and inorganic chemistry	W. H. Ellis, M.A., M.B., Professor } J. W. Bain, B.A. Sc., Lecturer } E. G. R. Ardagh, B.A. Sc., Demonstr't'r } S. Dushman, B.A., Fellow } E. Wade, Grad. S. P. S. }	373	480
Applied chemistry			
Electro chemistry			
Geology	A. P. Coleman, M.A., Ph.D., } Professor } G. R. Mickle, B.A., Lecturer..... } J. G. McMillan, B.A. Sc., Fellow .. }	152	193
Assaying			
Metallurgy			
Mining and ore dressing ..			
German			
Dynamics	J. Galbraith, M.A., Professor..... } J. McGowan, B.A., Lecturer } R. W. Angus, B.A. Sc., Lecturer.. } H. G. McVean, B.A. Sc., Demon- } strator } P. Gillespie, B.A. Sc., Demon- } strator	389	480
Strength of materials			
Theory of construction.....			
Machine design			
Mechanics of machinery ...			
Compound stress			
Hydraulics			
Mortars and cements			
Thermodynamics and the- ory of the steam engine..			
French			
Statics	C. H. C. Wright, B.A. Sc., Profes- } sor } J. R. Cockburn, B.A. Sc., Demon- } strator } J. A. McFarlane, B.A. Sc., Fellow.. } M. R. Riddell, Grad. S. P. S., Fellow }	377	447
Drawing			
Descriptive geometry			
Architecture			
Plumbing, heating and ven- tilation			
Brick and stone masonry...			
Surveying	L. B. Stewart, D. T. S., Professor ... } J. L. R. Parsons, B.A., Fellow } N. D. Wilson, B.A. Sc., Fellow }	373	342
Geodesy and astronomy....			
Spherical trigonometry			
Least squares			
Electricity	T. R. Rosebrugh, M.A., Professor.. } H. W. Price, B.A. Sc., Demonstrat'r. } H. G. Smith, B.A. Sc., Fellow..... } G. J. Manson, Grad. S. P. S., Fellow }	155	221
Magnetism			
Dynamo-electrical machin- ery			
Physics	G. R. Anderson, M.A., Lecturer		393

SUBJECTS TAUGHT BY THE FACULTY OF ARTS.

Subjects.	Instructors.	Number of Students.	
		2nd Term, Session 1903-04.	1st Term, Session 1904-05.
Algebra	Alfred Baker, M.A., Professor..... A. T. DeLury, B.A., Associate Professor..... M. A. McKenzie, M.A., Associate Professor..... J. C. Fields, B.A., Ph.D., Associate Professor..... J. G. Parker, B.A., Fellow.....	288	356
Euclid			
Plane trigonometry.....			
Analytical geometry.....			
Calculus			
Astronomy.....			
Physics	James Loudon, M.A., Professor.... W. J. Loudon, B.A., Associate Professor..... J. C. McLennan, B.A., Ph.D., Associate Professor.....	276	
Biology	R. Ramsey Wright, M.A., Professor..... T. L. Walker, M.A., Ph.D., Professor..... A. W. Parks, B.A., Ph.D., Lecturer..... W. L. Miller, M.A., Ph.D., Associate Professor..... W. H. Collins, B.A., Class Assistant..... H. L. Kerr, B.A., Class Assistant....	147	235
Mineralogy			
Petrography			
Electro chemistry.....			

GENERAL.

STATISTICS OF COST AND ATTENDANCE, ETC.

Item.	Average from 1890-91 to 1899-1900 inclusive.	1900-01.	1901-02.	1902-03.	1903-04.
Annual Expenditure on maintenance.....	\$23,235 92	\$32,792 98	\$34,910 73	\$39,793 77	\$44,619 23
Annual fees paid into Provincial Treasury	5,021 40	12,356 50	17,430 35	21,071 80	25,007 50
Annual net cost.....	18,214 52	20,436 48	17,480 38	18,721 97	19,611 73
Teachers' Salaries.....	14,698 00	20,600 00	22,325 00	24,425 00	27,432 00
Students in attendance.....	138	231	290	341	402
Annual cost per student.....	\$132 00	\$88 00	\$60 00	\$55 00	\$49 00
Teachers' Salaries per student.....	107 00	89 00	77 00	72 00	68 00

From the above table it will be seen that the annual cost of the School to the Province for the last fourteen years has been nearly stationary. The average annual cost for this period is \$18,454.69.

The annual cost per student in attendance in 1903-04 was \$49.00.

The expenditure on teachers' salaries per student in attendance was \$68.00.

These amounts are less even than the extraordinarily low figures for last year. They indicate the crowded state of the School and the insufficiency of the present staff for the work. It will be necessary to make additions both to the numbers and to the salaries of the teaching staff if the reputation of the School is to be maintained. Of the 27 members of the teaching staff, there are 16 whose salaries average less than \$600.00. The average salary of the whole teaching staff is about \$1,000.00.

In the above statements of the annual cost the interest on capital expenditure, depreciation and insurance are not included.

The total expenditure on capital account (buildings and equipment) from 1877 to the session 1899-1900, inclusive, was \$225,545.34. The annual expenditures since that time have been as follows: 1900-1901, \$4,257.60; 1901-1902, \$3,4927.13; 1902-1903, \$118,880.68; 1903-1904, \$144,041.42, making the total expenditure on capital account to the end of 1904, \$527,652.17. The great increases in the last three years are due to the new Chemistry and Mining Building.

The annual expenditure on insurance began in 1895, at which time it was \$490. At present it is \$872.

CHEMISTRY AND MINING BUILDING.

This building will give much needed relief in the subjects of Applied Chemistry, Electro chemistry, Mineralogy, Geology, Mining and Metallurgy.

It has been found necessary to place the geological and mineralogical collections in rooms required for other purposes pending the construction of the Museum wing which should be proceeded with immediately.

ENGINEERING BUILDING.

The subjects which remain in the old or "Engineering Building" are Strength and Elasticity of Materials, Statics, Dynamics, Theory of Construction, Machine Design, Mechanism, Hydrostatics, Hydraulics, Thermodynamics and Theory of Heat Engines, Optics, Acoustics, Surveying, Geodesy and Astronomy, Descriptive Geometry, Drawing, Electricity, Electrical Machinery, Architecture, Plumbing, Heating and Ventilation, Mortars and Cements, Masonry, etc. The space vacated by the removal of Chemistry, Mining, etc., to the new building is not at all suited for the necessary expansion in the above subjects.

The arrangement of the various laboratories in this building, which were designed sixteen years ago, is now in many respects unsuited to the present conditions. The new equipment which has been added from time to time is installed wherever room can be found for it. The result is inconvenience and difficulty in the use of the apparatus and a lack of system in the arrangement which must tend to produce an unfavorable impression in the mind of the visitor. The cause of the trouble is the rapid growth and increasing popularity of the School. These laboratories were designed for a total student population of 150; whereas the number at present in attendance is 484.

NEW ENGINEERING BUILDING.

The only remedy is the construction of a new Engineering building with as little delay as possible. This building must be near the Chemistry and Mining building, and yet not encroach upon the space occupied by the present engineering building as the work of instruction must be continued in the latter until the new one is completed.

In the meantime the space vacated in the present Engineering building will be utilized as follows in providing for next year's work. The space in the basement will be fitted up with electrical apparatus and machinery; that on the ground floor will be devoted to Optics and Hydrostatics and

that on the two upper floors to Architecture and Drawing. None of the space vacated can be used for expansion in Hydraulics, Thermodynamics or Mechanical tests of Materials on account of the great weight of the necessary machines and the amount of floor space required. A second experimental boiler is urgently required, but could not be installed to advantage in the present building. The additional equipment for next year's work must, in the meantime, be crowded into the space at present devoted to the above purposes. The accommodation for practical work in Astronomy is entirely inadequate and should be enlarged before the beginning of the next session.

The recommendations made in submitting the Estimates will cover the additions to staff and equipment necessary for the year 1905.

J. GALBRAITH,
Principal.

APPENDIX Q—ANNUAL REPORT OF THE PRESIDENT OF THE UNIVERSITY OF TORONTO.

To His Honor the Hon. WILLIAM MORTIMER CLARK,
Lieutenant-Governor of Ontario:

MAY IT PLEASE YOUR HONOR:

I have the honor to submit the following report for the year ended June 30th, 1904:

THE TEACHING STAFFS.

The following is a tabular statement of the numbers engaged in teaching during the year in the faculties named. These numbers include the Arts staffs of University College and Victoria College:

	Arts.	Medicine.	Applied Science.
Professors and Associate Professors.....	42	44	6
Lecturers and Demonstrators.....	18	12	6
Instructors and other Assistants.....	29	34	9
	89	90	21

CHANGES IN THE STAFFS.

The following paragraphs contain notes of the more important appointments and promotions in the various Faculties:

In the Department of Greek, Mr. A. Carruthers has been promoted to the rank of Associate Professor.

In the Faculty of Medicine the following appointments have been made consequent on the amalgamation with the Medical Faculty of Trinity University:

Dr. H. B. Anderson to be Professor of Clinical Pathology and Associate Professor of Clinical Medicine.

Dr. A. M. Baines to be Associate Professor of Clinical Medicine and Pediatrics.

Dr. G. A. Bingham to be Associate Professor of Clinical Surgery and Clinical Anatomy.

Dr. J. L. Davison to be Professor of Clinical Medicine.

Dr. J. T. Fotheringham to be Associate Professor of Medicine and Clinical Medicine.

Dr. F. LeM. Grasset to be Professor of Surgery and Clinical Surgery.

Dr. J. C. Mitchell to be Extra-Mural Professor of Mental Diseases.

Dr. N. A. Powell to be Professor of Medical Jurisprudence and Associate Professor of Clinical Surgery.

Dr. G. S. Ryerson to be Professor of Ophthalmology and Otology.

Dr. C. Sheard to be Professor of Preventive Medicine.

Dr. W. T. Stuart to be Associate Professor of Medical Chemistry.

Dr. J. Algernon Temple to be Professor of Operative Obstetrics and Gynaecology.

Dr. L. Tesky to be Professor of Surgery and Clinical Surgery.

Dr. D. J. Gibb Wishart to be Associate Professor in Laryngology and Rhinology.

Dr. G. H. Burnham, Associate Professor, to be Professor of Ophthalmology and Otology.

Dr. R. J. Dwyer, Lecturer in Medicine and Clinical Medicine, to be Associate Professor of Clinical Medicine.

Dr. A. R. Gordon, Lecturer, to be Associate Professor of Clinical Medicine.

Dr. G. A. Peters, Associate Professor, to be Professor of Surgery and Clinical Surgery.

Dr. R. D. Rudolf, Lecturer, to be Associate Professor of Medicine.

STUDENTS IN ARTS, MEDICINE AND APPLIED SCIENCE.

ARTS.

(1) B. A. Course:	
Regular	777
Occasional	182
Graduate	35
(2) Ph. D. course	18
	<hr/> 1,012

MEDICINE.

Regular	631
Occasional	90
	<hr/> 721

APPLIED SCIENCE.

Regular	398
Occasional	4
	<hr/> 402
	<hr/> 2,135

STUDENTS IN AFFILIATED COLLEGES.

Ontario Agricultural College:	
Regular students	595
Royal College of Dental Surgeons	190
Ontario College of Pharmacy	140
Toronto College of Music (proceeding to the degree of Mus. Bac.)	1
Toronto Conservatory of Music (proceeding to the degree of Mus. Bac.)	
	<hr/> 926
Total	<hr/> 3,061

CANDIDATES EXAMINED.

Arts	1,099
Ph. D.	1
Medicine	593
Law	27
Applied Science and Engineering	275
Pedagogy	2
Agriculture	22
Dentistry	164
Pharmacy	71
Music	367
Physical Training	1
Household Science	9
	<hr/> 2,671
Total	<hr/> 2,671

DEGREES CONFERRED.

LL. D. (Hon.)	14
Ph. D.	1

DEGREES CONFERRED.—*Con.*

M. A.	30
B. A.	141
M. D.	5
M. B.	108
LL. B.	12
D. D. S.	53
B. A. Sc.	19
B. S. A.	21
D. Pæd.	1
B. Pæd.	1
Phm. B.	53
	<hr/>
	462

DIPLOMAS AND CERTIFICATES.

Engineering	70
Local Examinations in Music	282
Licentiate in Music	2
Physical Culture	1
	<hr/>
Total	355

PROGRESS OF THE UNIVERSITY.

With a view of indicating the expansion and progress of the University in recent years I propose to submit, in the following paragraphs, some of the main facts regarding the increase in staff and students, in the various faculties, including some observations of a general nature upon the teaching.

ARTS FACULTY.

The following comparative table shows the increase in the staff and students in Arts for the last twelve years, inclusive of University and Victoria Colleges:

	1891-2.	1903-4.
Professors and Associate Professors	24	42
Lecturers	9	17
Assistants	11	28
	<hr/>	<hr/>
	44	87
	1891-2.	1903-4.
Students in B. A. course	545	777
Occasional students	134	182
Graduate students		35
Candidates for Ph. D.		18
	<hr/>	<hr/>
	679	1,012

Not only have the numbers of the staff been increased considerably during this period, but also the scope of the teaching has been widened and its character improved in important respects. The increased scope of the teaching may be judged to some extent by a comparison of the present curriculum with that of 1892. The honour departments have increased in number from nine to seventeen, indicating greater differentiation and more minute and concentrated treatment of the various branches of study. The methods of teaching have, in many cases, been greatly improved and in some cases almost completely revolutionized. Notwithstanding the numerical additions to the staff it is worthy of note that at no time in the history of the University has the work of teaching on the whole been performed with as great energy and activity.

Under ordinary circumstances the attendance on classes is one of the most significant general indications of the efficiency of the work done by the staff in the class-room, and this is particularly so in the University of Toronto, where attendance is not wholly compulsory. There has been, I think, a distinct improvement in this respect, and there is no department or subject in which the attendance is found to be unsatisfactory.

A fairly accurate index of efficiency may also be found in the demand which exists for our students to fill positions of various kinds, upon graduation, particularly those of an academic nature, in which our standard as compared with other universities may be more readily judged.

As a further indication of academic activity and energy on the part of the staff, I may mention the marked progress which has been made in the production of papers and other works involving original research. In the period mentioned our series of University Studies was established, and has proved most successful. In addition to this I might refer also to the lists of publications by members of the staff contained in the appendix to my annual reports of 1903 and 1904.

MEDICAL FACULTY.

The following table exhibits similar comparative statistics as regards the staff and students in the Faculty of Medicine:

	1891-2.	1903-4.
*Professors and Associate Professors	16	38
*Demonstrators and Assistants	13	31
	<u>29</u>	<u>69</u>
Regular students	286	631
Occasional students		90
	<u>286</u>	<u>721</u>

During this period the primary courses, which constitute the first two years of the Medical Curriculum, have been gradually improved, the scope of the work having been extended and the teaching rendered more thorough and practical. Special mention should perhaps be made of the departments of Materia Medica and Therapeutics which have been re-organized on a more scientific basis.

Another notable improvement has been made in the organization of a combined six years' course in Arts and Medicine, which enables students to obtain the Arts degree as well as the professional degree in the period mentioned. This has proved very attractive and is calculated to secure a higher type of medical practitioner.

Owing to the increased numbers of the staff as a result of the recent federation, it has been possible to make better arrangements for Clinical instruction than was formerly possible. An important addition to the facilities for Clinical instruction has been made through the appointment of tutors in the department of Medicine.

The establishment of post-graduate courses in various departments marks a distinct step in advance.

I might say in conclusion that our medical graduates continue to be sought after, as in the past, to fill teaching positions in many of the best

*These numbers are exclusive of those who are members of both the Arts and Medical Faculties.

schools of medicine in America and elsewhere. While the loss of such men to Canada is to be regretted, the fact of their success in academic work must be regarded as signal testimony to the excellent character of the training given in this University.

FACULTY OF APPLIED SCIENCE.

The statistics relating to the staff and students in Applied Science are shown in the following table:

	1891-2.	1903-4.
Professors	3	6
Lecturers	4	6
Assistants	2	9
	<hr/> 9	<hr/> 21
Regular students.....	118	398
Special students	8	4
	<hr/> 126	<hr/> 402

RESEARCH WORK.

In my previous reports, I have upon several occasions emphasized the importance of research as regards the future development of the University and the promotion of higher ideals in University work. I am gratified to report that, during the course of the year, the department of Mathematics has been added to the list of those offering graduate courses for research, leading to the degree of Ph.D. I consider it more than ever desirable that the scheme should be extended so as to include the remaining Arts Departments, viz.: Classics, Modern Languages, and History.

A list of publications by members of the various faculties or by advanced students will be found in the Appendix. Attention is directed to the fact that only a small number of these have appeared in the periodical issued under the name of "University Studies". Considering the importance of the object aimed at in this periodical, viz.: The publication of original papers by members of the University, it would be desirable to increase the very limited appropriation which has heretofore been placed at the disposal of the committee in charge. For report of the general Editor of the "University of Toronto Studies", see Addendum J.

SPECIAL UNIVERSITY LECTURES.

The usual course of Saturday popular lectures was delivered in January and February by Professor R. G. Moulton, Hon. George E. Foster, Professor J. C. McLennan, Mr. W. B. Yeats, Professor Ramsay Wright and Professor A. P. Coleman.

In addition to the above the following special lectures were delivered during the session 1903-1904:

Dr. W. H. Gaskell, F.R.S., Cambridge, Eng., on the "Origin of the Vertebrates".

Professor W. D. Halliburton, F.R.S., Professor of Physiology, King's College, London, on the "Degeneration and Regeneration of Nerves".

Professor C. S. Sherrington, F.R.S., Holt Professor of Physiology in the University of Liverpool, the inaugural lecture on the occasion of the

formal opening of the new Medical Buildings on October 1st, the subject being, "The Progress of Medicine in connection with the advances made in the Cognate Sciences".

THE LIBRARY.

From the report of the Librarian, which is appended, it will be seen that the total accumulation of books in the Library since the destruction of the former Library by fire in 1890, now amounts to 77,558 and upwards of 20,000 pamphlets. The number of volumes added during the year was 2,717, of which 483 were presented to the Library. In my last report I referred to the necessity for increasing the annual appropriation for the purchase of books, and I am gratified to be able to state that since that time a step has been taken in the desired direction. In my last report I referred to the necessity for increased accommodation in the Library Building. Owing to the crowded condition of the stack-room, the administrative offices and the reading-rooms, it will become imperatively necessary to make provision for extension of the building within two or three years.

NEW BUILDINGS.

The building for Applied Chemistry, Mineralogy, Geology and Mining, the erection of which was begun in 1902, is at present about completed, and is in part available for the purposes of instruction.

During the year it was decided to make a beginning in the direction of a residence for the women students of University College. For this purpose a house situated upon University lands in Queen's Park was purchased by the Trustees, and has since been fitted up and occupied as a residence. The building is known as Queen's Hall, and affords accommodation for about twenty students.

Owing to the increased importance of Household Science, and its recognition as a graduating department in the University, the necessity for a special building for the purposes of the department has been apparent for some time. I am gratified to report that in view of this necessity Mrs. Massey-Treble has generously offered to contribute the cost of erection of a suitable building, the site for which has been already chosen and the plans prepared.

BUILDING REQUIREMENTS.

In previous reports I have referred to the erection of a new building for the Department of Physics as the most urgent necessity of the University. The urgency of this claim has been recognized and the Trustees have been informed that provision has been made for its erection from the proceeds of the sale of the old Parliament Buildings block.

As stated in my last report a sum of upwards of \$51,000 has been subscribed by Alumni and friends of the University for the erection of a Convocation Hall. This sum has been supplemented by a grant of \$50,000 by vote of the Legislature. Unfortunately, owing to the increased cost of building, the total sum available is still insufficient, and an additional sum of \$50,000 will be required to meet the total estimated expenditure. In view of the importance of the project itself, and in view of the generosity of the Alumni and friends, it is to be hoped that means will be devised to procure the amount necessary for its realization in the near future.

In view of the desirability of affording residential accommodation to women students in attendance at the University from various parts of the Province, and in view of the increased demand for such accommodation, I would recommend that the present limited facilities in this respect be increased as soon as feasible.

In my last report I referred to the insufficient accommodation provided in the new Science Building for a Mineralogical and Geological Museum. The space of 4,000 sq. ft. temporarily allotted to this purpose is so entirely inadequate that immediate steps should be taken towards the erection of the museum wing of the Science Building as contemplated in the original plans.

In my report of last year, the better equipment of the department of Botany was urged, and it was shown at the same time that the subject had not as yet received in the University the attention and encouragement which its importance demands. In this direction hardly a beginning has been made. A full equipment in the way of buildings would consist of a Botanical Laboratory (including museum) with plant houses attached. I strongly recommend, as a partial provision for the desired facilities, the erection at a very early date of the Plant Houses above referred to.

Besides the more pressing building necessities referred to above, mention should also be made of the following additions which will be required for the full and symmetrical development of the University in the near future: (1) A residence for men; (2) an administration building; (3) a central plant for the economical supply of heat, light and power to the whole group of University buildings; (4) the further extension of the present Biological building.

NEW TEACHING DEPARTMENTS.

In view of the present importance of the subject of Botany, whether regarded from the scientific or the economic standpoint, it is highly desirable that there should be established in the University as soon as possible a lectureship in Vegetable Physiology, in which both the chemical and the physical aspects of the physiology of plant life would be adequately treated. This addition is necessary to supplement the work already being done in Botany on its morphological side.

In the University Act the subject of Education is specifically mentioned as one of those to be taught in the University. No provision, however, has hitherto been made in this direction. That it is the duty of a University to afford teaching in this subject has come to be generally recognized by educationists, and a department of Education indeed is provided for in the leading Universities of this continent. Such a department would be of the greatest possible benefit to those intending to enter the teaching profession, who form a considerable portion of the student body. In this connection it is worthy of consideration whether it would not be to the best interests of the professional training of teachers to transfer the work of the Normal College to the Provincial University. The advantages which would by this step accrue to the teachers in training through access to the facilities of the University in all departments would, in my opinion, prove of incalculable value.

In my last report I directed attention to the importance of providing systematic training in at least the fundamental principles of public speaking. During the present session an experiment has been made in this direction on a small scale, but with such gratifying results that I feel justi-

fied in recommending that permanent provision be made for establishing an instructorship in the subject.

OTHER REQUIREMENTS.

In view of recent enactments of the senate to provide facilities for students who find it impossible to attend full courses at the University, and especially as making provision for teachers who require additional instruction in the subject of nature study, I consider it desirable that steps should be taken as soon as possible towards the establishment of a summer session in connection with the University.

FINANCES.

The following figures exhibit the total revenues and expenditures for the three Faculties of Arts (University and University College), Medicine, and Applied Science and Engineering.

	Revenue.	Expenditure.
Arts	\$162,887 05	\$193,094 59
Medicine	64,296 97	64,296 97
Applied Science and Engineering	48,103 69	48,103 69

Details of these figures will be found in the Addendum. The deficit in Arts was met by a Legislative grant.

The figures relating to Applied Science and Engineering are extracted mainly from the public accounts of the Province, the financial administration of the School of Practical Science being directly under Government control. The net cost of the School to the Province would appear to be \$19,581.69.

I have the honor to be, Sir,

Your obedient servant,

J. LOUDON,

President.

TORONTO, April 10th, 1905.

ADDENDUM A.—REPORT OF THE DEAN OF THE FACULTY OF ARTS.

UNIVERSITY OF TORONTO.

JAMES LOUDON, Esq., LL.D.,

March 22nd, 1905.

President of the University of Toronto.

SIR: I beg to submit herewith a detailed list, for the academic year 1903-04, of the personnel of the teaching staff of the Faculty of Arts of the University of Toronto, and also statistics as to the attendance of students in the various subjects taught by the members of the staff. As will be seen, certain classes are taken advantage of by students of the Faculties of Medicine and Applied Science.

FACULTY OF ARTS.

Physics:

Professor, James Loudon, M.A., LL.D.

Associate-Professor, W. J. Loudon, B.A.

Associate-Professor, J. C. McLennan, B.A., Ph.D.
Lecturer, C. A. Chant, M.A., Ph.D.
Assistant Demonstrator, E. F. Burton, B.A.
Lecture Assistant, W. P. Near, B.A.
Class-Assistant, A. Thomson, B.A.
Class-Assistant, A. G. McPhedran, B.A.
Class-Assistant, M. E. Gowland, B.A.

Mathematics :

Professor, Alfred Baker, M.A.
Associate-Professor, A. T. DeLury, M. A.
Lecturer, J. C. Fields, B.A., Ph. D.
Assistant, L. K. File, B.A.

Chemistry :

Professor, W. R. Lang, D.Sc., F.C.S., F.I.C.
Associate-Professor of Physical Chemistry, W. L. Miller, B.A., Ph.D.
Lecturer, F. B. Allan, M.A., Ph. D.
Lecturer, F. B. Kendrick, M. A., Ph. D.
Assistant, C. M. Carson, B.A.
Fellow, R. E. DeLury, B.A.
Junior-Assistant, E. Forster, B.A.
Junior-Assistant, E. H. Jolliffe, B.A.

Biology :

Professor, R. Ramsay Wright, M.A., LL. D.
Lecturer in Zoology, B. A. Bensley, B.A., Ph. D.
Lecturer in Elementary Biology and Histology, W. H. Piersol, B.A., M.B.
Lecturer in Botany, J. H. Faull, B.A.
Instructor in Botany, R. B. Thomson, B.A.
Lecture and Laboratory Assistant in Biology, M.D. McKichan, B.A.,
Class-Assistants, E. A. McCulloch, B.A.; M. H. Embree, B.A., A. H. Adams, B.A.; A. C. Hendrick, M.A., M.B.; W. J. O. Malloch, B.A., M.B.; A. J. McKenzie, B.A., LL.B., M.B.; A. Henderson, B.A.; J. D. Loudon, B.A.; F. J. Munn, B.A.; H. M. McNeil, B.A.

Physiology :

Professor, A. B. Macallum, M.A., M.B., Ph.D.
Demonstrator, F. H. Scott, B.A., Ph.D.
Class-Assistants, W. J. O. Malloch, B.A., M.B.; A. C. Hendrick, M.A., M.B.; S. H. Westman, M.B.; D. McGillivray, M.B.

Geology and Palaeontology :

Professor, A. P. Coleman, M.A., Ph.D.
Lecturer, W. A. Parks, B.A., Ph. D.

Mineralogy and Petrography :

Professor, T. L. Walker, M.A., Ph.D.
Lecturer, W. A. Parks, B.A., Ph. D.
Class-Assistants, H. L. Kerr, B.A.; M. T. Culbert, B.A. Sc.

Comparative Philology :

Professor, Maurice Hutton, M.A., LL.D.

Modern History:

Professor, G. M. Wrong, M.A.

Political Economy:

Professor, James Mavor.

Lecturer, S. M. Wickett, B.A., Ph. D.

Philosophy:

Professor of History of Philosophy, J. G. Hume, M.A., Ph. D.

Professor of Philosophy and Director of the Psychological Laboratory, A. Kirschmann, M.A., Ph. D.

Lecturer, F. Tracy, B.A., Ph.D.

Lecturer and Assistant in Psychological Laboratory, A.H. Abbott, B.A., Ph. D.

Assistant in Psychological Laboratory, T. R. Robinson, B.A.

Italian and Spanish:

Professor, W. H. Fraser, M.A.

Lecturer, F. J. A. Davidson, M.A., Ph.D.

Instructor in Italian, E. J. Sacco.

Roman Law, Jurisprudence, and History of English Law:

Professor, A. H. F. Lefroy, M.A.

Constitutional and International Law and Constitutional History:

Professor, J. M. Young, M.A.

The following tables exhibit the numbers attending lectures in University subjects, together with the numbers of those taking the practical work in the laboratories:

MATHEMATICS.

	Pass.	Pass and Honors.	Honors
Arts—First Year.....	140		33
Second Year.....			43
Third Year.....			13
Fourth Year.....	28		9
Applied Science—First Year.....		182	
Second Year.....			101
Totals	168	182	199

PHYSICS.

	Pass.	Pass and Honors.	Honors.	Laboratory
Arts—First Year	27	60		27
Second Year	8		35	35
Third Year.....	2		13	13
Fourth Year.....			9	9
Ph. D. Students.....				
Medicine—First Year.....			136	
Applied Science—First Year.....			158	158
Second Year			104	104
Third Year.....				73
Totals	37	60	455	419

BIOLOGY.

	Pass.	Pass and Honors.	Honors.	Lab.
Arts—First Year.....	108	45	2	47
Second Year.....			28	28
Third Year.....			16	16
Fourth Year.....			10	10
Medicine—First Year.....		147		147
Second Year.....		130		130
Totals.....	108	322	56	378

PHYSIOLOGY.

	Pass.	Pass and Honors.	Honors.	Lab.
Arts—Second Year.....			28	28
Fourth Year.....			10	10
Medicine—First Year.....		147		
Second Year.....		130		130
Totals.....		277	38	168

CHEMISTRY.

	Pass.	Pass and Honors.	Honors.	Lab.
Arts—First Year.....			78	78
Second Year.....	4		55	56
Third Year.....			25	25
Fourth Year.....			13	13
Graduate Students.....				2
Medicine—First Year.....		147		147
Second Year.....		130		130
Applied Science—Third Year.....			2	
Totals.....	4	277	173	460

GEOLOGY.

	Pass.	Pass and Honors.	Honors.	Lab.
Arts—First Year.....			49	
Second Year.....	90		7	
Third Year.....			16	
Fourth Year.....			1	
Ph. D. Students.....				
Applied Science—Second Year.....		87		
Third Year.....		39		
Fourth Year.....			6	
Totals.....	90	126	79	

MINERALOGY.

	Pass.	Pass and Honors.	Honors.	Lab.
Arts—Second Year.....			20	20
Third Year.....			8	8
Fourth Year.....			5	5
Applied Science—First Year.....			88	88
Second Year.....			60	60
Third Year.....				13
Fourth Year.....				4
Totals.....			181	190

PHILOSOPHY.

	Logic.		Psychology.		History of Philosophy	
	Pass.	Honors.	Pass.	Laboratory	Honors.	Honors.
Second Year.....	119	35	137	35		35
Third Year.....				21	24	
Fourth Year.....			20	25		
Graduate Students.....						
Ph. D. Students.....						
Totals.....	119	35	157	81	24	35

POLITICAL SCIENCE AND HISTORY.

	Economics.		History.		Constitutional History.		Law.
	Pass.	Honors.	Pass.	Honors.	Pass.	Honors.	Honors.
Second Year.....		25	61	45		35	
Third Year.....	10	45	41	54	30	22	27
Fourth Year.....	14	20	40	28	34	26	28
Commercial Course.....	8						
Graduate Students.....	5						
Totals.....	27	95	142	127	64	83	55

ITALIAN, SPANISH AND PHONETICS.

	Italian.	Spanish.		Phonetics
	Honors.	Pass.	Honors.	Honors.
First Year.....	47	25		67
Second Year.....	25	2	11	
Third Year.....	8		3	
Fourth Year.....	10		8	
Totals.....	90	27	17	67

I also subjoin statistics as to the courses selected by regular students proceeding to a degree in Arts in the University. The following table indicates whether the students in question are enrolled in University College or Victoria College :

	First Year.		Second Year.		Third Year.		Fourth Year.	
	U. C.	V. C.	U. C.	V. C.	U. C.	V. C.	U. C.	V. C.
Classics	15	3	9	4	8	5	10	2
English and History	17	3	10	3	9	2	2	1
Modern Languages	39	16	22	7	21	9	18	4
Oriental Languages			3	3	1		2	2
History					3			
Political Science			22	4	21	2	20	3
Philosophy			20	13	12	6	19	10
Mathematics and Physics	16	8	10	5	13	1	12	5
Physics and Chemistry			7	3	1		2	
Chemistry and Mineralogy			9	3	4	3	4	
Natural Science I.					7	1	6	
Natural Science II.			8		1			
Biological and Physical Sciences			14	3	5	2	1	3
Household Science	2	5		2				
Science	34	6						
Commercial	2							
General Course	58	32	18	10	15	12	17	17

I am, Sir, Yours faithfully,
(Sgd.) R. RAMSAY WRIGHT,
Dean of the Faculty of Arts.

ADDENDUM B.—REPORT OF UNIVERSITY COLLEGE.

PRINCIPAL, MAURICE HUTTON, M.A., LL.D.

Greek :

Professor, Maurice Hutton, M.A., LL.D.
Associate-Professor, Adam Carruthers, M.A.

Latin :

Professor, John Fletcher, M.A., LL.D.
Associate-Professor of Ancient History, W. S. Milner, M.A.
Lecturer, G. W. Johnston, B.A., Ph.D.

English :

Professor, W. J. Alexander, B.A., Ph. D.
Associate-Professor of Anglo-Saxon, D. R. Keys, M.A.

German :

Professor, W. H. Vander Smissen, M.A.
Lecturer, G. H. Needler, B.A., Ph. D.
Instructor, P. Toews, M.A., Ph. D.

French :

Professor, John Squair, B.A.
Associate-Professor, John Home Cameron, M.A.
Instructor, St. Elme de Champ, B es L.

Oriental Literature :

Professor, J. F. McCurdy, Ph.D. LL.D.
Lecturer, R. G. Murison, M.A., Ph.D.

Ethics :

Professor, J. G. Hume, M.A., Ph. D.

The following table exhibits the number of students in attendance during the session :

<i>First Year:</i>			
Regular	174		
Occasional	19		
		193	
<i>Second Year:</i>			
Regular...	143		
Occasional	14		
		157	
<i>Third Year:</i>			
Regular	121		
Occasional	15		
		136	
<i>Fourth Year:</i>			
Regular	105		
Occasional	31		
		136	
Graduates		27	
Ph. D.		4	
		653	

The following tables exhibit the number of students in attendance upon lectures in subjects of the General and Honor Courses :

GENERAL COURSE.

	Greek.	Latin.	Ancient History.	English.	German.	French.	Oriental.	Ethics.
First Year.....	22	182	52	110	75	85	34	
Second Year.....	16	52		119	41	40	14	
Third Year.....	3	26		73	13	15	3	57
Fourth Year.....	2	15		89	10	9	5	
Totals.....	43	225	52	341	139	149	56	57

HONOR COURSE.

	Greek.	Latin.	Ancient History.	English.	German.	French.	Oriental.	Ethics.
First Year.....	17	15	17	71	44	61		
Second Year.....	14	12	32	35	25	26	3	
Third Year.....	11	12	19	30	21	23	1	13
Fourth Year.....	13	15	12	41	15	20	2	
Ph. D. Students.....			1				3	
Totals.....	55	54	81	174	105	130	9	13

ADDENDUM C.—VICTORIA UNIVERSITY.

Rev. Nathanael Burwash, S.T.D., LL.D., F.R.S.C., President.

Rev. Alfred H. Reynar, M.A., LL.D., Dean of the Faculty of Arts and William Gooderham Professor of English Literature.

A. R. Bain, M.A., LL.D., Nelles Professor of Ancient History.

Rev. E. I. Badgley, M.A., LL.D., Egerton Ryerson Professor of Mental and Moral Philosophy.

Rev. Frances Huston Wallace, M.A., D.D., Dean of Faculty of Theology and Geo. A. Cox Professor of Biblical Greek.

A. J. Bell, M.A., Ph.D. (Bresl.), Macdonald Professor of Latin Language and Literature.

Rev. John Burwash, M.A., D.Sc., LL.D., H. A. Massey Professor of English Bible.

L. E. Horning, M.A., Ph. D. (Geottingen), Professor of German and Old English.

Rev. J. F. McLaughlin, B.A., B.D., Eliza Phelps Massey Professor of Oriental Languages and Literature.

J. C. Robertson, B.A., W. E. H. Massey Professor of the Greek Language and Literature.

Pelham Edgar, Ph.D., Eliza Gooderham Professor of the French Language and Literature.

A. L. Langford, M.A., Associate-Professor of the Greek Language and Literature.

A. E. Lang, M.A., Associate-Professor of the German Language and Literature.

E Masson, Instructor in French.

A. P. Misener, M.A., Lecturer in Oriental Languages and Literature.

The following table exhibits the number of Arts students in attendance during the session 1903-04:

<i>First Year:</i>			
Regular	87		
Occasional	9		
		<hr/>	96
<i>Second Year:</i>			
Regular.....	57		
Occasional	18		
		<hr/>	75
<i>Third Year:</i>			
Regular	43		
Occasional	18		
		<hr/>	61
<i>Fourth Year:</i>			
Regular	47		
Occasional	13		
		<hr/>	60
<i>Graduates:</i>			
Occasional	8		
Ph. D.	1		
		<hr/>	9
		<hr/>	301

ADDENDUM D.—FACULTY OF MEDICINE.

DEAN OF THE FACULTY OF MEDICINE, PROFESSOR R. A. REEVE, B.A., M.D., LL.D.

Professores Emeriti:

James Thorburn, M.D.; M. H. Aikins, M.D.; W. W. Ogden, M.D.; J. H. Richardson, M.D., Uzziel Ogden, M.D.

Professors of Surgery and Clinical Surgery:

I. H. Cameron, M.B., Tor., F.R.C.S., Eng.; F. LeM. Grasett, M. D. C.M., F.R.C.S., Edin.; G. A. Peters, M.B., Tor., F.R.C.S., Eng.; L. Teskey, M.D., C.M., Trin.

Associate-Professor of Clinical Surgery and Clinical Anatomy:

G. A. Bingham, M.D., C.M., Trin., M.B. Tor.

Associate-Professors of Clinical Surgery:

A. Primrose, M.B., C.M., Edin.; N. A. Powell, M.D., C.M., Trin.; M.D., Bellevue, N. Y.; W. Oldright, M.A., M.D., Tor.; H. A. Bruce, M.B., Trin., F.R.C.S., Eng.; F. N. G. Starr, M.B., Tor.

Associate-Professor of Clinical Surgery in charge of Orthopaedics:

C. L. Starr, M.B., Tor.

Demonstrators of Clinical Surgery:

W. McKeown, B.A., M.B., Tor.; C. A. Temple, M.D., C.M., Trin.; A. H. Garratt, M.D., C.M., Trin.; C. B. Shuttleworth, M.D., C. M., Trin., F.R.C.S., Eng.; T. B. Richardson, M.D., C.M., Trin., F.R.C.S., Edin.; J. F. Uren, M.D., C.M., Trin.

Professor and Director of the Anatomical Department:

A. Primrose, M.B., C.M., Edin.

Associate-Professor of Anatomy:

H. W. Aikins, B.A., M.B., Tor.

Demonstrator of Anatomy:

C. B. Shuttleworth, M.D., C.M., Trin., F.R.C.S., Eng.

Assistant Demonstrators of Anatomy:

W. J. McColum, M.B., Tor.; W. J. O. Malloch, B.A., M.B., Tor.; S. H. Westman, M.B., Tor.; G. Elliott, M.D., C.M., Trin.; E. R. Hooper, B.A., M.B., Tor.; W. J. Wilson, M.B., Tor.; A. C. Hendrick, M.A., M.B., Tor.; C. P. Lusk, M.D., C.M., Trin.; A. J. MacKenzie, B.A., LL.B., M.B., Tor.; D. McGillivray, M.B., Tor.; E. S. Ryerson, M.D., C.M., Trin.; F. W. Marlow, M.D., C.M., Trin.; F.R.C.S., Eng.

Professor of Medicine and Clinical Medicine:

A. McPhedran, M.B., Tor.

Associate Professors of Medicine:

J. T. Fotheringham, B.A., Tor.; M.D., C.M., Trin.; R. D. Rudolf, M.D., C.M., Edin., M.R.C.P., Lond.

Professor of Clinical Medicine:

J. L. Davison, B.A., Tor., M.D., C.M., Trin.

Associate-Professors of Clinical Medicine:

A. M. Baines, M.D., C.M., Trin.; W. P. Caven, M. B., Tor.; W. B. Thistle, M.B., Tor.; J. T. Fotheringham, B.A., Tor., M.D., C.M., Trin.; A. R. Gordon, M.B., Tor.; R. J. Dwyer, M.B., Tor., M.R.C.P., Lond.; H. B. Anderson, M.D., C.M., Trin.

Associates in Clinical Medicine:

G. Boyd, B.A., M.B., Tor.; F. Fenton, M.D., C.M., Trin.; H. C. Parsons, B. A., M.D., C. M., Trin.; W. Goldie, M.B., Tor.

Professor of Pathology and Bacteriology and Curator of the Museum and Laboratories:

J. J. Mackenzie, B.A., M.B., Tor.

Professor of Clinical Pathology :

H. B. Anderson, M.D., C.M., Trin.

Associate-Professor of Pathology and Bacteriology :

J. A. Amyot, M.B., Tor.

Laboratory Assistant in Bacteriology :

T. D. Archibald, B.A., M.B., Tor.

Demonstrators in Pathology :

G. Silverthorn, M.B., Tor.; C. J. Wagner, M.B., Tor.

Assistant Demonstrators of Pathology :

W. H. Pepler, M.D., C.M., Trin.; H. C. Parsons, B.A., M.D., C.M., Trin.; M. M. Crawford, M.B., Tor.; F. A. Clarkson, M.B., Tor.; R. H. Mullin, M.B., Tor.; E. S. Ryerson, M.D., C.M., Trin.

Assistants in Clinical Laboratory :

H. S. Hutchison, M.B., Tor.; W. N. Meldrum, M.B., Tor.

Professor of Preventive Medicine :

C. Sheard, M.D., C.M., Trin.

Professor of Materia Medica, Pharmacology and Therapeutics :

J. M. MacCallum, B.A., M.B., Tor.

Professor of Gynaecology and Operative Obstetrics :

J. Algernon Temple, M.D., C.M., McGill.

Professor of Obstetrics :

A. H. Wright, B.A., M.B., Tor.

Professor of Gynaecology :

J. F. W. Ross, M.B., Tor.

Associate-Professor of Obstetrics and Pediatrics :

H. T. Machell, M.B., Tor.

Associate-Professor of Pediatrics :

A. M. Baines, M.D., C.M., Trin.

Associates in Obstetrics :

K. C. McIlwraith, M.B., Tor.; F. Fenton, M.D., C.M., Trin.

Professors of Ophthalmology and Otology :

R. A. Reeve, B.A., M.D., LL.D., Tor.; G. S. Ryerson, M.D., C. M. Trin.; G. H. Burnham, M.D., Tor., F.R.C.S., Edin.

Associates in Ophthalmology and Otology :

C. Trow, M.D., C.M., Trin; J. M. MacCallum, B.A., M.B., Tor.

Professor of Laryngology and Rhinology :

G. R. McDonagh, M.B. (Tor.)

Associate-Professor of Laryngology and Rhinology:

D. J. G. Wishart, B.A., Tor., M.D., C.M., McGill.

Associate of Laryngology and Rhinology:

G. Boyd, B.A., M.B., Tor.

Professor of Hygiene:

W. Oldright, M.A., M.B., Tor.

Professor of Toxicology:

W. H. Ellis, M.A., Tor.

Professor of Medical Jurisprudence:

N. A. Powell, M.D., C.M., Trin., M.D., Bellevue, N.Y.

Extra-Mural Professors of Mental Diseases:

N. H. Beemer, M.B., Tor.; J. C. Mitchell, M.D., C.M., Trin.

Professor of Physics:

James Loudon, M.A., LL.D., Tor.

Lecturer on Physics:

C. A. Chant, B.A., Tor., Ph. D., Harv.

Professor of Chemistry:

W. R. Lang, D.Sc., Glasg.

Associate-Professor of Medical Chemistry:

W. T. Stuart, M.D., C.M., Trin.

Lecturers in Chemistry:

F. B. Kenrick, M.A., Tor., Ph. D., Leip.; F. B. Allan, M.A., Ph. D., Tor.

Professor of Biology:

R. Ramsay Wright, M.A., B. Sc. Edin. LL.D., Tor.

Lecturer in Zoology:

B. A. Bensley, B.A., Tor., Ph. D., Col.

Lecturer in Elementary Biology and Histology:

W. H. Piersol, M.B., Tor.

Professor of Physiology:

A. B. Macallum, M.A., M.B., Tor., Ph.D., Johns Hopkins.

Demonstrator of Physiology:

F. H. Scott, B.A., Ph. D., Tor.

Assistant Demonstrators of Physiology:

W. J. O. Malloch, B.A., M.B., Tor.; S. H. Westman, M.B., Tor.; A. C. Hendrick, M.A., M. B., Tor.; D. McGillivray, M.B., Tor.

The following table exhibits the number of students registered as in attendance upon the lectures given by the staff of the Faculty of Medicine:

Graduate Students	9
Fourth Year Students	153
Third Year Students	170
Second Year Students	134
First Year Students	160
Occasional Students	90
Total	722

ADDENDUM E.—APPLIED SCIENCE AND ENGINEERING.

DEAN OF THE FACULTY, PRINCIPAL GALBRAITH, M.A., LL.D.

Chemistry :

Professor, W. H. Ellis, M.A., M.B.
 Lecturer, J. W. Bain, B.A. Sc.
 Fellow, E. G. R. Ardagh, B.A. Sc.
 Fellow, C. G. Williams, Grad. S.P.S.
 Lecture Assistant, F. G. Marriott, Grad. S.P.S.

Geology, Mining and Metallurgy :

Professor, A. P. Coleman, Ph.D.
 Lecturer, G. R. Mickle, B.A.
 Fellow, J. G. McMillan, B.A.Sc.

Applied Mechanics :

Professor, J. Galbraith, M. A.
 Lecturer, J. McGowan, B.A., B.A.Sc.
 Lecturer, R. W. Angus, B.A. Sc.
 Demonstrator, H. G. McVean, B.A.Sc.
 Fellow, A. E. Davison, Grad. S.P.S.

Architecture and Drawing :

Professor, C. H. C. Wright, B.A.Sc.
 Fellow, S. B. Wass, Grad. S.P.S.
 Fellow, J. R. Cockburn, B.A.Sc.

Surveying and Geodesy :

Professor, L. B. Stewart, D.T.S.
 Fellow, J. L. R. Parsons, B.A.

Electricity :

Professor, T. R. Rosebrugh, M.A.
 Demonstrator, H. W. Price, B.A.Sc.
 Fellow, H. M. Shipe, Grad. S.P.S.

Number of Students by Years.

First year	187
Second year	106
Third year	85
Fourth year	20
Occasional	4
	<hr/> 402

Number of Students by Departments.

1. Civil Engineers	140
2. Mining Engineers	50
3. Mechanical and Electrical Engineers	197
4. Architecture	4
5. Applied Chemistry	11
	<hr/> 402

ADDENDUM F.—THE LIBRARY.

The Librarian of the University begs to submit his annual report for the year ending June 30th, 1904:

1. The number of bound volumes added to the Library during the year was 2,717, of which 483 were presentations, making the total contents of the Library 77,558 volumes. The number of pamphlets added during the year was 1,403. The total number pamphlets, of which no accurate account was kept until the last few years, now exceeds 20,000.

2. During the session 1903-4 the average continuous number of readers in the reading-room is estimated at 62. The largest number counted was 126 in the morning of April 18th. The statistics of the use of books by students are as follows, comparison being made with similar statistics for the previous year.

	1902-3	1903-4
Average No. of books read in the reading-room during term per week	819	768
Average No. of books borrowed by students over night per week	323	338
Total No. of books taken out by students for periods longer than one night	2,788	3,390

Under the arrangement for giving students access to the stack-room on recommendation of a professor, 33 persons were admitted during the year for various periods; the number for the previous year was 34.

3. The number of institutions and learned societies on the exchange list of the Library, to which the University of Toronto Studies and the University Calendar and Examination Papers are sent is now 261. The Library receives 280 periodicals and serial publications in return, besides University calendars and many occasional publications from Institutions included in the above total of 261 to which the University's publications are sent.

4. In recognition of the urgent need for more money to spend on books, to which attention was directed in the report of last year, the appropriation for the coming year out of ordinary income has been raised from \$2,600 to \$3,000. The supplementary allowance from the unexpended remainder of insurance-money on the old library has also been increased from \$3,400 to \$3,500, so as to make the total appropriation to the Library for the year \$6,500 instead of \$6,000 as heretofore. The increase, while not affording any substantial relief to the pressure upon the finances of the Library, is gratifying as a recognition that the necessities of the Library are recognized.

5. In last year's report attention was also directed to the lack of accommodation in the building for reading-room and administrative purposes and to the probability of the stack-room being filled with books to its full working capacity within two years. The subject having subsequently been brought by the Library Committee before the Board of Trustees, the architect was instructed to prepare a comprehensive plan for future extensions of the Library building.

6. A handsome donation was made to the Library during the year, consisting of over 100 volumes of rare and valuable works on Roman and Civil Law, from the Library of the late Professor of Roman Law in the University, the Honourable William Proudfoot, presented by his executors. Another valuable addition to the Library was made through the kindness of the Premier and Members of the Government of Ontario, to whom application was made for leave to bid at the sale of a private library in Germany, exceptionally rich in works relating to the history of the German drama. By their

permission \$1,000, outside of the regular Library appropriation, was spent at this sale, and a valuable collection of periodicals and monographs on the subject in question acquired.

All of which is respectfully submitted.

(Sgd.) H. H. LANGTON,
Librarian.

ADDENDUM G.—BIOLOGICAL MUSEUM.

April 8, 1905.

To President Loudon.

SIR: I beg to report as follows with regard to the condition of the Biological Museum, during the present academical year:

1. The most important change which has occurred is the removal of the Ferrier Collection of Minerals to the new building for Geology and Mineralogy. This renders the north half of the upper floor available for the purpose for which it was originally intended—the accommodation of the Botanical side of the Museum. Already a large collection of models is awaiting a suitable display in cases, and during the summer it is intended that a large amount of illustrative material shall be collected with the help of the appropriation made for this purpose. It is, however, indispensable that cases be provided, and I venture to hope that a suitable sum will be placed in the estimates to provide these.

Should special buildings be erected, as is urged elsewhere, devoted exclusively to Botany, it would be proper to provide a room in these for the special Botanical Museum, while the space thus set free in the Biological Museum would be devoted to the illustration of more general problems of Plant Life, and its relationship to the Animal Kingdom.

2. An important addition to the Botanical Museum has been made by the purchase on the part of the Ontario Government of a large and interesting series of plants from Professor Macoun, Ottawa, which has been entrusted to the care of this Department.

3. I have also to record a valuable addition to the Zoological side of the Museum, in the form of a number of cases illustrative of the Ornithology of the Province, being a collection formed by the late Sir Casimir Gzowski, and presented to the University by Lady Gzowski.

4. The work of cataloguing the collections has progressed. It has been under the charge of Dr. E. M. Walker, who has not only continued the card catalogue of Vertebrates, now nearly finished, but has rendered very valuable service, for which his previous studies have admirably fitted him, in arranging our collection of Insects.

I desire to point out, however, that some permanent provision must be made in the near future for the diagnosis, cataloguing, arrangement and display of our Zoological Collections, the time of the various members of the staff being wholly occupied by the largely increased demands in teaching.

5. Professor Henry Montgomery, who was appointed Curator of the new Museums of Geology and Palaeontology, found that his services would not be required this year in connection with these, and undertook, at my request, to catalogue the synoptic collection of Fossils in this Museum. This work, the carrying out of which has been for some years a great desideratum, has now, thanks to Professor Montgomery's wide palaeontological knowledge been very satisfactorily completed.

6. The storage and showcase for birds, for which an appropriation was made, is in course of completion, and will permit of a very desirable re-arrangement of our (at present much crowded ornithological collections.

I have to express the hope that a similar appropriation will be made next year to carry out the next stage in the plan already submitted to yourself and the Board of Trustees, viz.: cases for the proper display of our collection of Fishes.

7. The small appropriation for specimens has been expended, not in the purchase of systematic collections, but in increasing the efficiency of the Museum as an educative appliance primarily intended for the use of the students of the Department.

8. I have, however, to report that the general public avails itself very largely of the circumstance that the Museum is open every afternoon, and that the number of daily visitors is on the increase.

I have the honor to be, Sir,

Your obedient servant,
(Sgd.) R. RAMSAY WRIGHT.

ADDENDUM H.—MEMORANDUM REGARDING GEOLOGICAL AND MINERALOGICAL MUSEUM.

In view of the occupation of the new Science Building, it is necessary to consider the space available for museum purposes. Owing to the cutting down of the plan, the wing intended for the Museum was omitted, and it has been arranged that a large lecture-room shall be used temporarily for museum purposes. The ground space thus provided is about 50 by 80 feet. The palaeontological material now on hand, including the collection being transferred to the department by Mr. B. E. Walker, is sufficient to fill the whole space. Other departments require accommodation as well, showing that the present provision is entirely insufficient. To provide for the present collections and future expansion it is desirable that the museum wing should be erected as soon as possible. At present this material is stored in drawers and is being transferred into the new cases purchased during the past year; a large number more of similar cases will be required to properly exhibit the specimens already in the possession of the Department without any allowance for a much needed increase. The present museum accommodation is entirely inadequate for the needs of the Departments of Geology and of Mineralogy.

(Sgd.) A. P. COLEMAN,
Professor of Geology.

ADDENDUM J.—UNIVERSITY OF TORONTO STUDIES.

To the President of the University of Toronto.

SIR: I beg to submit the following report on University of Toronto Studies for the year 1904.

1. The publications of the year were as follows:—

History and Economics—Review of Historical Publications, Vol. 8, edited by Messrs. Wrong and Langton.

History and Economics—Municipal History of Manitoba, by A. C. Ewart.

Municipal Government in the Northwest Territories, by S. M. Wickett.

Municipal Institutions in the Province of Quebec, by R. Stanley Weir.

Psychology—Combinations of colours and uncoloured light, by Miss S. A. Chown. Complementary relations of some systems of coloured papers, by Messrs. McGregor and Dix. Some photometrical measurements, by W. G. Smith. Stereoscopic vision and intensity, by T. R. Robinson.

Physiology—Palaeochemistry of the ocean, by Professor Macallum.

Geology—Geology of Michipicoten Island, by E. M. Burwash.

Physical Science—A radioactive gas from crude petroleum, by E. F. Burton.

Papers from the Chemical Laboratories—The Oxalates of Bismuth, by F. B. Allan.

The Economic Admission of Steam to Water Gas Producers of the Lowe Type, by G. W. McKee.

The Rate of formation of Iodates in Alkaline Solutions of Iodine, by E. C. L. Forster.

Numerical values of certain functions involving e^{-x} , by Professors W. Lash Miller and T. R. Rosebrugh.

A Reaction whose rate is diminished by raising the temperature, by Clara C. Benson.

On the decomposition of Benzine at High Temperatures, by G. W. McKee.

The Action of liquefied Ammonia on Chromic Chloride, by Professors W. R. Lang and C. M. Carson; Note on the Action of Methylamine on Chromic Chloride, by Professor W. R. Lang and E. H. Jolliffe.

A mechanical model to illustrate the gas laws, by F. B. Kenrick.

The rate of the reaction between iodic and hydriodic acid, by S. Dushman.

The electrolysis of acid solutions of aniline, by Lachlan Gilchrist.

Some compounds of chromic chloride with substituted ammonias, by Professor W. R. Lang and C. M. Carson.

2. The necessity of increased funds for the publication of the Studies was mentioned in last year's report. It may be added that two large volumes, the result of years of historical research, have been offered to the Committee for publication during the ensuing twelve months. The authors are graduates of the University, and both former holders of the Mackenzie Fellowship in History and Political Science. The investigations also of which these volumes are the fruit were begun during their authors' respective tenures of the Fellowship. Both works, therefore, are the immediate result of endowment for research in the University itself, and it is peculiarly fitting that the University should undertake their publication. But unless the grant for the Studies is considerably increased, or special funds for the purpose provided, it will be impossible to accept the books for publication.

All of which is respectfully submitted.

(Sgd.) H. H. LANGTON,
General Editor.

ADDENDUM K.—MARINE AND LACUSTRINE BIOLOGICAL STATIONS OF CANADA.

To the President of the University of Toronto:

SIR: I beg to submit the following report as to the co-operation of members of the University in the scientific work carried on at these stations. The appropriation made by the Board of Trustees has been expended in meeting, in part or in whole, the expenses of workers not provided for out of the Dominion appropriation.

MARINE STATION AT MALPEQUE.

During the season of 1904, I again acted as Assistant Director of this Station, remaining there from the middle of June till the middle of September.

ber. Considerable progress was made with investigations into the life-history of the oyster, which may lead to the establishment of experiments on a commercial scale on methods of oyster cultivation suitable to Canadian waters. Dr. J. H. Faull, Mr. L. C. Coleman, B.A., and Mr. J. Ross Murray, spent the greater part of the season there. Their travelling expenses were met out of the University grant. Messrs. Faull and Coleman were engaged on the Flora and Fauna, respectively, of the oyster bed, and Mr. Murray prepared a number of illustrations for a paper by myself on the Natural History of the Oyster. It is probable that the station will be located in 1905, at Gaspe, P.Q.

LACUSTRINE STATION AT GEORGIAN BAY.

Dr. B. A. Bensley, who was in charge, reports as follows:

The Georgian Bay Station was occupied from June 1st to September 5th. The following gentlemen attended during the whole or a part of the summer:—Messrs. A. G. Huntsman and Davidson Black, student-assistants from the University of Toronto, Mr. L. C. Coleman, B.A., assistant in Zoology (during the early part of the season), Mr. A. P. Gundry, B.A., Science Master of the Brantford Coll. Inst., Mr. J. M. Cole, M.A., of the Woodstock, Coll. Inst.

The early part of the season was employed in experiments on the artificial rearing of fishes in the Laboratory. Later Mr. Huntsman extended, mounted and arranged the collection of plants begun by the late Mr. Anderson, in 1902, and submitted a report thereon for publication. Similar work on the birds was done by Mr. Black. Messrs. Cole and Gundry made collections of the Molluscs and aquatic insects. Mr. Huntsman also studied the feeding habits of the black bass in its early stages of growth, and representative organisms of the plankton.

The appointments of the station have been greatly improved, chiefly by the addition of a pumping apparatus for the water supply, the addition of appliances for microscopic technique, and the erection of a dwelling house for those engaged in the laboratory.

An effort is being made to extend the usefulness of the station by inviting the science teachers of Ontario, many of whom are graduates of the University of Toronto, to attend the summer sessions. The advantages of a fully equipped laboratory with natural surroundings will, I believe, be appreciated and lead to the establishment of a permanent summer school.

The expenses of Messrs. Coleman, Huntsman and Black were met out of the appropriation made for this purpose by the Trustees of the University.

(Sgd.) R. RAMSAY WRIGHT.

ADDENDUM L.—FINANCIAL STATEMENT.

I. FACULTY OF ARTS.

Receipts, 1903-4.

Interest on purchase moneys	\$ 6,768 30
Interest on loans	12,759 97
Interest on debentures	11,027 38
Interest on bank balances	413 14
Interest on cost of new building payable by Medical Faculty: ,	
(a) On three-fifths of \$125,000	3,000 00
(b) On three-fifths of \$50,000	1,200 00
Rentals, University Park Lands	13,559 79
Business properties	3,492 79
School of Science site	925 00

Biological Building	1,900 00
City of Toronto (park)	6,000 00
Sundry earnings	993 00
Fees	59,850 40
Legislative grant	7,000 00
Wild land sales	1,347 86
	<hr/>
	\$130,238 14

Reserve for interest on Retirement Fund, Scholarship and other Trust Funds, \$9,784 27

SUMMARY OF EXPENDITURE, 1903-4.

1. Salaries and Pensions:	
(a) Salaries	\$96,443 20
(b) Pensions	1,200 00
2. Bursar's Office	749 09
3. Registrar's Office	2,204 69
4. Vice-Chancellor's Office	685 00
5. President's Office	1,125 60
6. Law Costs	794 23
7. General Incidentals	1,235 25
8. Insurance	2,000 00
9. Telephones	290 00
10. Convocation Expenses	988 06
11. Examinations	7,786 04
12. Library	3,652 47
13. Grounds	3,818 08
14. Main Building	6,545 65
15. Biological Department:	
(a) Maintenance of Structure	2,963 37
(b) Maintenance of Department	3,626 38
16. Physiological Department	7,400 00
17. Psychological Department	849 04
18. Mathematics	59 31
19. Political Science	6 70
20. History	236 89
21. Italian and Spanish	24 88
22. Advertising (University)	424 60
23. Incidentals (University)	157 05
24. University College Departments:	
Classics	180 05
English	200 00
French	30 00
German	173 46
Oriental Literature	25 00
Stationery	59 15
Printing	57 58
Advertising	65 88
Incidentals	242 75
25. Gymnasium and Students' Union	1,846 45
26. University Press	1,656 51
27. Dining Hall	500 00
28. Educational Association Reception	257 45
	<hr/>
Total Expenditure (exclusive of Departments sustained by Government)	\$150,661 41

DETAILS.

Salaries.

1. Bursar's Office:	
Bursar	\$2,400 00
Accountant	1,400 00
Fees Clerk	700 00
	<hr/>
	\$4,500 00

2. Library:

Librarian	\$2,300 00
First Assistant	550 00
Second Assistant	500 00
Cataloguer	500 00
Two Delivery Clerks	380 00
Caretaker	500 00
	<hr/>
	\$4,630 00

3. University of Toronto, general:

President (also paid as Professor of Physics)	\$2,300 00
Vice-President	400 00
Registrar	1,900 00
Registrar's Stenographer	450 00
Registrar's Stenographer	200 00
Bedell (with free house)	650 00
Architect	100 00
Janitor	500 00
Engineer (with rooms and fuel)	576 00
Fireman (salary at \$35 per month for 8 months)	280 00
Carpenter	620 00
Cleaners	768 00
Messenger	163 00
	<hr/>
	8,902 00

4. Pension:

E. J. Chapman	1,200 00
	<hr/>
	1,200 00

5. Teaching Staff, etc., University of Toronto:

(a) Modern History and Ethnology:

Professor	3,200 00
	<hr/>
	3,200 00

(b) Political Science:

Professor	3,200 00
Professor of Constitutional and International Law and Constitutional History	1,700 00
Professor of Roman Law, Jurisprudence and History of English Law	875 00
Lecturer (sessional)	1,000 00
	<hr/>
	6,775 00

(c) Mathematics:

Professor	3,200 00
Associate Professor	1,900 00
Special Lecturer	1,500 00
Fellow	225 00
	<hr/>
	6,825 00

(d) Biology:

Professor	3,900 00
Lecturer in Zoology and Assistant Curator Museum	1,400 00
Lecturer in Biology and Histology	1,100 00
Lecturer and Laboratory Assistant (sessional)	250 00
Class Assistants (sessional)	475 00
Sub-Curator Museum	750 00
Attendant and Caretaker	500 00
Laboratory Attendant	185 20
	<hr/>
	7,860 20

Sub-Department of Botany:

Lecturer in charge of sub-department	1,075 00
Instructor (sessional)	500 00
	<hr/>

\$9,435 20

(e) Physiology:	
Professor	3,200 00
Professor (arrear)	100 00
Demonstrator (seasonal)	1,000 00
Class Assistants	225 00
	<hr/>
	4,525 00
(f) Italian and Spanish:	
Professor	2,700 00
Professor (arrear)	100 00
Lecturer (9 months)	750 00
Instructor in Italian	400 00
	<hr/>
	3,950 00
(g) Philosophy:	
Professor	2,500 00
Lecturer	1,675 00
Lecturer and Laboratory Assistant	1,100 00
Laboratory Assistant (seasonal)	200 00
	<hr/>
	5,475 00
6. Teaching Staff, University College:	
(a) Ethics, Professor	3,200 00
(b) Greek:	
Professor	3,200 00
Associate Professor	1,800 00
	<hr/>
	5,000 00
(c) Latin:	
Professor	3,200 00
Lecturer and Associate Professor Ancient History	1,900 00
Lecturer	1,675 00
	<hr/>
	6,775 00
(d) Oriental Literature:	
Professor	3,200 00
Lecturer	1,675 00
	<hr/>
	4,875 00
(e) English:	
Professor	3,200 00
Associate Professor Anglo-Saxon	1,900 00
	<hr/>
	5,100 00
(f) French:	
Professor	2,700 00
Professor (arrear)	100 00
Associate Professor	1,900 00
Instructor	1,000 00
	<hr/>
	5,700 00
(g) German:	
Professor	2,700 00
Professor (arrear)	100 00
Associate Professor	1,800 00
Instructor	1,000 00
	<hr/>
	5,600 00
7. University College, general:	
Principal	400 00

8. Gymnasium:		
Secretary	200 00	
Instructor	800 00	
Caretaker	576 00	
		1,576 00
	Expenses.	
2. Bursar's Office:		
Stationery, postage, printing and incidentals	449 09	
Auditor	300 00	
		749 09
3. Registrar's Office:		
Stationery and office supplies	417 56	
Postage.....	600 00	
Printing, other than Calendar	324 64	
Printing Calendar and Curricula	862 44	
		2,204 64
4. Vice-Chancellor's Office:		
Honorarium to Vice-Chancellor	400 00	
Expense indemnity	285 00	
		685 00
5. President's Office:		
Secretarial allowance	200 00	
Postage and incidentals.....	219 43	
Travelling expenses	706 17	
		1,125 60
6. Law costs	794 23	
7. General incidentals, including commissions on real estate transactions	1,235 25	
8. Insurance	2,000 00	
9. Telephones	290 00	
10. Convocation expenses	988 96	
11. Examinations:		
(a) Remuneration to Examiners:		
Arts	862 79	
Medicine	2,051 75	
Law	83 00	
Engineering and Applied Science.....	140 00	
Dentistry	565 50	
Agriculture.....	299 00	
Music	1,081 63	
Pharmacy.....	397 93	
Pedagogy	41 25	
Matriculation	91 50	
Household Science	20 00	
Physical Drill	12 00	
		5,646 34
(b) Stationery and supplies	486 70	
(c) Cost of printing examination papers and class lists	1,973 00	
		8,111 04
Less Government share for Departments of Chemistry and Physics ...	325 00	
		7,786 04
12. Library:		
(a) Maintenance:		
Fuel	562 12	
Water	33 43	
Cleaning	170 00	
Repairs and incidentals.....	97 92	
		863 47

(b) Customary grant for books	2,600 00
(c) Occasional clerical assistance	189 00
	<hr/>
	8,652 47
13. Grounds:	
Labor, tools, gravel, culverts, etc.	3,295 48
Portion of cost of new granolithic walks	523 50
	<hr/>
	3,818 98
14. Main Building:	
Repairs (including carpentry and plumbing), and sundries	3,096 14
Fuel	4,237 42
Water	307 24
Gas and Electric Light	904 35
	<hr/>
	8,545 65
Less Government share for Department of Physics	2,000 00
	<hr/>
	6,545 65
15. Biological Building:	
(a) Maintenance of Structure:	
Fuel	1,359 08
Gas and electric light	233 92
Water	125 06
House furnishings and cleaning materials	224 51
Repairs, including carpentry, plumbing and painting	423 70
Additional attendance and cleaning assistance	347 15
Additional lockers, etc.	350 00
	<hr/>
	3,063 37
Less Government share for Department of Mineralogy and Geology...	100 00
	<hr/>
	2,963 37
(b) Biological Department:	
Laboratory and Lecture Room supplies	320 51
Museum supplies	345 09
Marine and Lake laboratories	296 78
Students' laboratory supplies.....	869 50
Assistance in preparation of catalogue	250 60
New microscopes and projection apparatus	998 00
Sub-department of Botany:	
Apparatus... ..	245 60
Plant specimens, including herbarium.....	300 00
	<hr/>
	3,626 33
16. Physiological Department:	
Maintenance, including students' laboratory supplies ...	857 37
Apparatus for equipping laboratory	3,524 97
Share of maintenance, Medical Building	3,017 66
	<hr/>
	7,400 00
17. Psychological Department:	
Maintenance	348 54
Optical Apparatus	500 50
	<hr/>
	849 04
18. Mathematics	59 51
19. Political Science:	
Class room supplies	6 70
20. History:	
Class room supplies and provision for reading essays ...	236 89
21. Italian and Spanish:	
Class room supplies	24 89
22. Advertising	424 60
23. Incidentals	157 05

24. University College Departments:

Classics:	
Class room supplies.....	180 05
English:	
Class room supplies and provision for reading essays	200 00
French:	
Class room supplies	30 00
German:	
Class room supplies and assistants	173 43
Oriental Literature:	
Class room supplies	25 00
Stationery	59 15
Printing	57 53
Advertising.....	65 63
Incidentals	242 75
	<hr/> 1,033 67

25. Gymnasium and Students' Union:

Fuel	535 12
Water	127 02
Gas	66 84
Cleaning	63 13
Repairs and incidentals	1,082 29
Apparatus, labor, etc.	72 05
	<hr/> 1,946 45

26. University Press:

Portion of cost of presses and type	650 00
Additions to type and equipment.....	341 83
Incidental expenses, repairs to cottage, etc.	664 68
	<hr/> 1,656 51

27. Dining Hall:

Grant towards maintenance	500 00
---------------------------------	--------

28. Educational Association reception

257 45

DEPARTMENTS MAINTAINED BY GOVERNMENT.

Summary.

1. Chemistry:	
Salaries ..	\$10,081 00
Maintenance	4,279 51
2. Physics:	
Salaries	11,500 00
Maintenance.....	4,999 22
3. Mineralogy and Geology:	
Salaries	6,025 00
Maintenance	5,223 45
4. Examination expenses:	
Share of above departments	325 00
	<hr/> \$42,433 13

Details.

1. Chemistry:

(a) Salaries:

Professor.....	2,800 00
Associate Professor.....	2,100 00
Lecturer	1,275 00
Lecturer	1,275 00
Assistant (sessional)	500 00
Two Junior Assistants (sessional).....	700 00
Assistant (sessional)	500 00
Attendant	504 00
Cleaner	177 00
Fireman (8 months)	250 00
	<hr/> 10,081 00

(b) Maintenance of building:

Fuel.....	648 19
Gas and electric light	328 57
Water	129 45
Cleaning	99 00
Repairs and incidentals	878 52
Equipment of Physical Chemistry laboratory	151 15
Extra lockers	574 50
	<u>2,904 36</u>

(c) Maintenance of department:

Chemicals, glassware, balances, etc.	1,628 33
Appropriation for sub-department of physical chemistry	352 12
	<u>4,279 51</u>

2. Physics:

(a) Salaries:

Professor	8,200 00
Associate Professor	1,900 00
Associate Professor	1,900 00
Lecturer	1,800 00
Assistant Demonstrator.....	800 00
Lecture assistant	500 00
Class assistants (seasonal)	600 00
Mechanical assistant	800 00
	<u>11,500 00</u>

(b) Maintenance of department:

Supplies, apparatus, etc.	2,999 27
Proportions of fuel, water, light, cleaning, repairs and incidentals, Main Building account	2,000 00
	<u>4,999 22</u>

3. Mineralogy and Geology:

(a) Salaries:

Professor Geology	700 00
Professor Mineralogy	2,675 00
Lecturer	1,350 00
Class assistants	1,000 00
Attendant	300 00
	<u>6,025 00</u>

(b) Maintenance of department:

Mineralogy:

Apparatus	845 47
Maintenance, including expenses collecting minerals, etc.	637 93
Museum cases, specimens, etc....	1,024 95
Proportions of fuel, water, light, cleaning, repairs and incidentals, Biological Building account	100 00
	<u>2,608 35</u>

Geology:

Apparatus, fossils, etc.	2,102 28
Supplies and sundries	512 82
	<u>2,615 10</u>

4. Examination expenses:

Share of above departments	325 00
----------------------------------	--------

II. FACULTY OF MEDICINE.

RECEIPTS.

Fees:	
First year	\$14,863 00
Less Arts, portion	1,834 00
	\$12,529 00
Second year	\$12,678 00
Less Arts portion	1,770 00
	10,908 00
Third year	16,568 00
Fourth year	15,176 00
Miscellaneous	1,995 00
Registration	780 00
Examination	1,688 00
Psychology	540 00
Interest on bank account	577 21
New Medical Building, share of maintenance from Physiological Department	3,017 16
New Medical Building, rent of rooms:	
Provincial Board of Health	\$500 00
Toronto Medical Society	20 00
	520 00
	\$64,296 97

EXPENDITURE.

Summary.

Salaries	\$37,142 33
Maintenance:	
Anatomical Department	\$5,810 48
Departments other than Anatomy	9,357 40
New Building	7,043 01
General expenses	4,943 70
	27,154 59
	\$64,296 97

DETAILS.

Salaries.

Professors:

A. Primrose, Anatomy	\$2,000 00
J. J. Mackenzie, Pathology, etc.	2,000 00
I. H. Cameron, Surgery and Clinical Surgery	910 25
F. Le M. Grasett, Surgery and Clinical Surgery	949 65
G. A. Peters, Surgery and Clinical Surgery	910 25
L. Teskey, Surgery and Clinical Surgery	949 65
A. McPhedran, Medicine and Clinical Medicine	910 25
J. L. Davison, Clinical Medicine	949 65
C. Sheard, Preventive Medicine	949 65
J. A. Temple, Operative Obstetrics, etc.	949 65
A. H. Wright, Obstetrics	910 25
W. Oldright, Hygiene	910 25
J. F. W. Ross, Gynaecology	606 70
J. M. MacCallum, Pharmacology, etc.	856 70
H. B. Anderson, Clinical Pathology	633 10
N. A. Powell, Medical Jurisprudence	633 10
R. A. Reeve, Ophthalmology, etc.	364 02
G. R. McDonagh, Laryngology, etc.	364 02
W. H. Ellis, Toxicology	303 91
G. S. Ryerson, Ophthalmology, etc.	253 24
G. H. Burnham, Ophthalmology, etc.	242 68
	\$17,556 97

Associate Professors:

G. A. Bingham, Clin. Anat. and Clin. Surg.	633 10
A. M. Baines, Clin. Medicine	633 10
J. T. Fotheringham, Clin. Medicine	633 10
W. P. Caven, Clin. Medicine	606 70

H. W. Aikins, Anatomy	606 70
H. A. Bruce, Clin. Surgery	485 40
D. J. G. Wishart, Laryngology, etc.	303 84
F. N. G. Starr, Clin. Surgery,	364 10
J. A. Amyot, Pathology	364 10
W. B. Thistle, Clin. Medicine	364 10
R. D. Rudolf, Medicine, etc.	364 10
A. R. Gordon, Medicine, etc.	364 10
R. J. Dwyer, Medicine, etc.	364 10
C. L. Starr, Orthopaedics	364 10
H. T. Machell, Obstetrics, etc.	254 87
W. T. Stuart, Medical Chemistry	500 00

7,205 51

Demonstrators and Associates:

G. Boyd, Clinical Medicine	253 20
G. Chambers, Clinical Medicine	253 20
F. Fenton, Clinical Medicine	152 00
H. C. Parsons, Clinical Medicine... ..	152 00
W. Goldie, Clinical Medicine	152 00
W. McKeown, Clinical Surgery	253 20
C. A. Temple, Clinical Surgery	253 20
A. H. Garratt, Clinical Surgery	253 20
C. B. Shuttleworth, Clinical Surgery ..	152 00
T. B. Richardson, Clinical Surgery	152 00
J. F. Uren, Clinical Surgery	152 00
K. C. McIlwraith, Obstetrics	253 20
F. Fenton, Obstetrics	152 00
C. Trow, Ophthalmology	253 20
C. B. Shuttleworth, Anatomy	450 00
W. J. McCollum, Anatomy	150 00
W. J. O. Malloch, Anatomy	150 00
G. E. Elliott, Anatomy	150 00
E. R. Hooper, Anatomy	150 00
W. J. Wilson, Anatomy	150 00
A. C. Hendrick, Anatomy ..	150 00
C. P. Lusk, Anatomy	150 00
A. J. Mackenzie, Anatomy	150 00
D. McGillivray, Anatomy	150 00
E. S. Ryerson, Anatomy	100 00
S. H. Westman, Anatomy	100 00
T. B. Richardson, Anatomy	50 00
F. W. Marlow, Anatomy	50 00
T. D. Archibald, Pathology, etc. ...	250 00
G. Silverthorn, Pathology, etc.	150 00
C. J. Wagner, Pathology, etc.	150 00
M. M. Crawford, Pathology, etc.	150 00
H. C. Parsons, Pathology, etc.	150 00
W. H. Pepler, Pathology, etc.	150 00
F. A. Clarkson, Pathology, etc.....	100 00
H. S. Hutchison, Clinical Laboratory ..	250 00
W. N. Meldrum, Clinical Laboratory	100 00
E. S. Ryerson, Assistant	50 00
R. H. Mullin, Assistant	50 00

6,486 40

General Service:

A. Primrose, Secretary to Faculty	1,200 00
J. J. Mackenzie, Assistant Secretary ..	100 00
Thos. Motton, caretaker	720 00
J. S. Pollock, chief engineer (7 months) ..	420 00
John Taylor, assistant engineer (7 months) ..	355 00
Alex. Wilson, janitor (9 months)	453 50
George Lynne, attendant, Anat. dept.	660 00
J. Anderson, attendant (9½ months)	380 00
H. Crombie, boy messenger, etc.	143 00
Miss M. Armour, stenographer	422 00

4,853 50

Miscellaneous:

Dr. N. H. Beemer, Psychology fees	540 00	
Dr. J. H. Richardson, Honorarium as retired Professor ...	250 00	
Dr. Uzziel Ogden, Honorarium as retired Professor ...	250 00	
		1,040 00
		<u>\$37,142 38</u>

III. FACULTY OF APPLIED SCIENCE AND ENGINEERING.

(School of Practical Science.)

EXPENDITURE.*

Summary.

Salaries (details below)	\$32,255 94
Expenses	6,042 04
Maintenance and repairs	6,321 31
Instruction in Arts Faculty	2,053 00
Examiners	1,431 43
	<u>\$48,103 69</u>
Receipts from fees	28,522 00
Showing a difference of	19,581 69
(being the excess of expenditure over receipts supplied from vote of Legislature.)	

DETAILS OF SALARIES.

Principal and Professors.

J. Galbraith, Principal and Professor in Engineering	\$3,200 00
A. P. Coleman, Professor in Geology	2,100 00
W. H. Ellis, Professor in Applied Chemistry	1,900 00
L. B. Stewart, Professor in Surveying	2,000 00
C. H. C. Wright, Professor in Architecture ..	2,000 00
T. R. Rosebrugh, Professor in Electrical Engineering	2,000 00
	<u>13,200 00</u>

Lecturers and Registrar.

J. McGowan, Lecturer in Applied Mechanics	1,300 00
G. R. Mickle, Lecturer in Mining	1,700 00
R. W. Angus, Lecturer in Mechanical Engineering	1,400 00
J. W. Bain, Lecturer in Analytical Chemistry. ...	1,300 00
G. R. Anderson, Lecturer in Physics	300 00
A. T. Laing, Registrar and Librarian	1,300 00
	<u>7,300 00</u>

Demonstrators.

H. G. McVean, Demonstrator, Mechanical Engineering...	900 00
H. W. Price, Demonstrator, Electrical Engineering	900 00
E. G. R. Ardagh, Demonstrator, Chemistry	175 00
Peter Gillespie, Demonstrator, Applied Mechanics ...	175 00
Jas. R. Cockburn, Demonstrator, Drawing	175 00

2,525 00

Fellows and Assistants.

F. G. Marriott, Assistant Lecturer, Chemistry	375 00
J. Horton, Assistant Lecturer, Chemistry	125 00
A. E. Davidson, Fellow in Civil Engineering	375 00
A. E. Gibson, Fellow in Civil Engineering	125 00

*These figures are for the year ending December 31, 1904.

S. B. Wass, Fellow in Mechanical Engineering	375 00
J. A. McFarlane, Fellow in Mechanical Engineering	125 00
J. G. McMillan, Fellow in Mining Engineering	500 00
E. G. R. Ardagh, Fellow in Chemistry	375 00
S. Dushman, Fellow in Chemistry	125 00
C. G. Williams, Fellow in Chemistry	377 00
E. Wade, Fellow in Chemistry	125 00
J. L. R. Parsons, Fellow in Surveying	500 00
N. D. Wilson, Fellow in Surveying	125 00
H. M. Shiye, Fellow in Electrical Engineering	375 00
H. G. Smith, Fellow in Electrical Engineering	125 00
G. J. Manson, Fellow in Electrical Engineering	125 00
J. R. Cockburn, Fellow in Drawing	375 00
M. R. Riddell, Fellow in Drawing	125 00
Herbert Fullerton, Assistant in Mechanical Laboratory	90 17

4,842 17

Attendants.

David Sinclair, Attendant in Chemistry.....	600 00
George Lamb, Attendant in Metallurgy	410 00
D. K. Ambrust, Attendant in Drafting Room	300 00
E. Tozer, Attendant in Mining	300 00
Ernest Thompson, Attendant in Electrical Laboratory	54 10
A. Enright, Messenger	150 00
A. J. Richard, Stenographer	350 00
W. J. Graham, Caretaker	798 00
W. Simpson, Engineer.....	900 00
A. F. McKay, Fireman and Stoker	280 00
W. B. Scott, Night Fireman	180 00
M. McBrearty, Chief Engineer Chemical and Mining Building	100 00
S. Hunter, Assistant Engineer Chemical and Mining Building	66 67
W. Foggett, Fireman Chemical and Mining Building	50 00
B. McMahon, Fireman Chemical and Mining Building	50 00

4,588 77

\$32,255 94

**ADDENDUM M.—LIST OF PAPERS AND WORKS BY MEMBERS OF FACULTIES
AND RESEARCH STUDENTS FOR THE YEAR 1903-1904.**

ALLAN, F. B.

“The Oxalates of Bismuth.” (Transactions of the Royal Society of Canada, Second Series, Vol. IX.)

ANDERSON, H. B.:

“The Etiology and Pathology of Arterio-sclerosis.” (*American Medicine.*)

BAKER, ALFRED:

“Geometry for Schools—Theoretical.” A sequel to “Elementary Plane.”

“Geometry—Inductive and Deductive.” (W. J. Gage & Co., Toronto.)

CHANT, C. A.:

“The Variation of Potential along the Transmitting Antenna in Wireless Telegraphy.” (*American Journal of Science*, Jan., 1904; *Philosophical Magazine*, Feb., 1904.)

COLEMAN, A. P.:

“The Iroquois Beach in Ontario.” (Geol. Soc. America.)

“The Northern Nickel Range.” (Bureau of Mines of Ontario.)

EDGAR, PELHAM:

Articles on:

Maeterlinck. (*Toronto Globe.*)

Stephen Philips—Review of “Sin of David.” (*Toronto Globe.*)

Yeats and the Irish Movement. Two articles. (*Toronto Globe.*)

- Ibsen. Two articles. (*Toronto Globe*.)
 Nationalism in Literature. (*Toronto Globe*.)
 Lampman. (*Toronto Globe*.)
 Science and Poetry. (*Toronto Globe*.)
 Bliss Carman. (*Toronto Globe*.)
 D. C. Scott. (*Toronto Globe*.)
 John Morley. (*The News*, Toronto.)
 "Shelley's Debt to Eighteenth Century Thought." (*Trans. Royal Soc. Can.*)
 "William Morris, Poet, Artist and Socialist." (*Acta Victoriana*.)
 Editor (in collaboration with Mr. D. C. Scott) of Morang's Series of "Makers of Canada."

FIELDS, J. C.:

- "The German University and German University Mathematics." (*Proceedings of the Ontario Educational Association*, 1903.)
 "Forms for the Abelian Integrals of the three kinds in the case of a curve for which the tangents at the multiple points are distinct from one another." (*Journal für die reine und angewandte Mathematik*, Band 127, 1904, Berlin.)

FRASER, W. H. AND SQAIRE, J.:

- "A French Grammar for Schools and Colleges," abridged edition, with new exercises. Boston and London. D. C. Heath & Co., 1903.

HENDERSON, V. E.:

- "Immunity in the Light of Recent Studies." (*The Canadian Practitioner*, July, 1903.)
 "Some Notes on Artificial Neurotoxic Serum." (*Univ. of Penn. Med. Bull.*, Sept. 1903.)
 "Hay Fever: Etiology and Specific Treatment." (*Can. Practitioner*, Jan., 1904.)

HORNING, L. E.:

- "A Bibliography of Canadian (English) Fiction." (Victoria University Library Publications. No. 2.)

HUME, J. G.:

- "Some Needed Reforms in Canadian Schools." *Woodstock Daily Express, Free Press, Sentinel Review*, Dec., 1903.)
 "Rural School Reform." (*The School Journal*, New York, Chicago, Boston, Feb. 1903. Reprinted in *Canadian Educational Monthly*.)
 "Herbert Spencer, A Review." (*The Westminster*, 1903.)
 "Suicide, Statistics and Significance." (*Toronto Sunday World*, March, 1904.)

KENRICK, F. B.:

- The following paper was prepared under the direction of Dr. Kenrick:
 Miss C. C. Benson, "The Composition of the Surface Layers of Aqueous Amyl Alcohol." (*Journal Phys. Chem.*, 7, 532, 1903).

KEYS, D. R.:

- "On the Genesis of American Humor." (Paper read before Can. Institute, March 1904.)
 "On the Origin of the Historical Method." (In First Report of the Archivist for Ontario, 1904.)
 The following paper was prepared under the direction of Prof. Keys:
 "The Anglo-Saxon Scop," by L. F. Anderson. (University of Toronto Philological Publications, No. 1.)

KIRSCHMANN, A.:

- "Ueber Eisgewinnung und kuenstliche Verglerscherung." On the formation of ice and artificial glaciation. (*Physicalische Zeitschrift*, Vol. IV., No. 27.)
 "Deception and Reality." (*American Journal of Psychology*, Vol. XIV., Commemorative Number in honor of Dr. Stanley Hall.)
 "On Parallel Curves, and consequently on the Alaskan Boundary Dispute." *Univ. of Toronto Monthly*, Vol. IV., No. 2.)
 "The Decimal System of Notation,—a Relic of Savagery." *Univ. of Toronto Monthly*, Vol. IV., No. 8.)

LANG, W. R.:

"The Action of Liquified Ammonia on Chromic Chloride." In collaboration with C. M. Carson. (*Jour. Amer. Chem. Soc.*, April, 1904.)

"The Action of Methylamine on Chromic Chloride." In collaboration with E. H. Joliffe. (*Jour. Amer. Chem. Soc.*, April, 1904.)

"Some Compounds of Chromic Chloride with Substituted Ammonias." In collaboration with C. M. Carson. (*Jour. Amer. Chem. Soc.*, July, 1904.)

The following papers were prepared under the direction of Professor Lang:

"The Economic Admission of Steam to Water Gas Generators of the Lowe Type." By G. W. McKee. (*Jour. Soc. Chem. Ind.*, April, 1904.)

LANGTON, H. H. (See under WRONG, G. M.)

McLENNAN, J. C.:

"On the Radioactivity of Metals Generally." In collaboration with E. F. Burton. (*Phil. Mag.*, Sept., 1903; *Trans. Royal Society of Canada*, Vol. IX., p. 37; *Phys. Zeit.*, Jahr 4, No. 20, Seite 553-556.)

The following papers were prepared under the direction of Professor McLennan:

"On the Character of Radiation from Ordinary Metals." By E. F. Burton. (*Phys. Review*, March, 1904; *Phys. Zeit.*, Jahr 5, Seite 444-445.)

"A Radioactive Gas from Crude Petroleum." By E. F. Burton. (*Univ. of Toronto Studies*, Phys. Sc. series, No. 4; *Phys. Zeit.*, Jahr 5, No. 16, Seite 511-516.)

MILLER, W. LASH:

The following papers were prepared under the direction of Professor Miller:

"A Reaction whose rate is Diminished by Raising the Temperature." By Miss C. C. Benson. (*Jour. Phys. Chem.*, VIII., 116 (1904.)

"The Rate of Formation of Iodates in Alkaline Solutions of Iodine." By E. L. C. Forster. (*Jour. Phys. Chem.*, VII., 640, 1903.)

MITCHELL, J. C.:

"Presidential Address to the Ontario Medical Association in June, 1903." (*Canadian Lancet*; *Dominion Medical Monthly*, July, 1903.)

MURISON, R.:

"A History of Egypt." T. & T. Clark, Edinburgh. (Bible Class Primer Series. Ed. by Principal Salmond.)

"The Character of David." (*The Expository Times*, Edin.)

"The Laws of Hammurabi." (*The Univ. of Toronto Monthly*.)

"Education in Babylonia." (*The Varsity*.)

"The Oldest Law Code." (*The Westminster*.)

"Banking in Ancient Babylonia." (*The Canadian Bankers' Journal*.)

"The Sabbath Service." (*The Presbyterian*.)

"The Rise of the Synagogue." (*The Sabbath School Teachers' Monthly*.)

"The Hebrew Monarchy." (*The Sabbath School Teachers' Monthly*.)

OLDRIGHT, W.:

"Vaccination and the Public Health." (Transactions of the Associations of Executive Medical Health Officers of Ontario.)

"Some Causes Illustrating Difficulties in the Diagnosis and Treatment of Tumors." (*Dominion Medical Monthly*.)

PARKS, W. A.:

"Devonian Fauna of Kwataboahagan River." (Bureau of Mines, Ontario, Vol. XIII., 1904.)

"The Study of Stratigraphy." (Canadian Mining Institute, Vol. VIII., March 1904.)

PEPLER, W. H.:

"Malignant Eudocarditis in Childhood." (*Canadian Journal of Medicine*.)

"Uterine Fibromyomates with Pyosalpinx." (*Canadian Journal of Medicine*.)

REYNAR, A. H.:

"Select Poems of Alfred Tennyson, annotated edition." (W. J. Gage & Company, Toronto.)

RUDDOLF, R. D.:

- "The Causation Symptoms and Diagnosis of Gall Stones." (*International Clinica*, Vol. III., 1903.)
- "The Lung Reflex." (*Lancet*, Nov., 1903, London.)
- "The Pretyphoid State." (*Canadian Lancet*, 1904.)
- "The Visceral Manifestations occurring in the Erythems Group of Skin Diseases" (*Canadian Lancet*, 1904.)
- "The Shrine of the Nujha Bridge." (*Wide World Magazine*, 1903.)
- "Mr. Nathaniel Snyder, a Smuggling Story." (*Canadian Magazine*, 1904.)

SQUAIR, J. (See under FRASER, W. H.)

TEACY, F.:

- "A Syllabus of Lectures in Logic." (The Univ. Press, Toronto.)
- "Method in General; Individual Types." Three articles. (*Teachers' Monthly*.)
- "Heredity and Environment; Formation vs. Information." (*Teachers' Monthly*.)
- "A Scientific Basis for Religious and Moral Education from the Standpoint of Ethics." (Proceedings of the Philadelphia Convention of the Religious Association, 1904.)

WALLACE, F. H.:

- "The Relation of the Fourth Gospel to the Synoptics." (*The Methodist Quarterly Review*, Nashville, Tenn., 1903.)
- "College and Church." (*The Methodist Magazine and Review*, Toronto, 1904.)

WALLACE, M. W.:

- "The Birthe of Hercules." With an introduction on "The Influence of Plautus on the English Dramatic Literature of the Sixteenth Century." (Scott, Foresman & Company, Chicago.)

WRONG, G. M.:

- "The British Nation." (Appleton & Company, New York; Morang & Company, Toronto.)
- "The Review of Historical Publications Relating to Canada," Vol. VIII. Edited in collaboration with H. H. Langton. (*University of Toronto Studies*.)

APPENDIX R—Certificates of Public and Separate School Teachers engaged in the Province, February, 1905.

Inspectorate.	Inspector.	Teachers' Certificates.							Total.
		I. Prof. or Interim from Normal College.	II. Prof. or Interim from one of Normal Schools.	III. Class Prof.	Renewals or extensions of III. Class.	Old Co. Board Certificates.	District.	Temporary.	
Brant	T. W. Standing, B.A.	9	42	26	8				80
Bruce, E.	W. S. Clendenning	4	42	57	9	1	2	5	122
Bruce, W.	W. I. Chisholm, M.A.	9	53	51	10			1	124
Carleton	R. H. Cowley, B.A.	7	65	50	19	1		6	148
Dufferin	N. Gordou	7	40	48	19			1	117
Dundas	A. Brown	5	30	61	8		1		108
Durham and S. Monaghan Tp.	W. E. Tilley, M.A.	5	64	66	8	1		2	141
Elgin	W. Atkin	9	46	62	17			3	138
Essex, N.	D. Cheney		9	12	4		6	3	34
Essex, S.	D. A. Maxwell, B.A.	5	52	39	16		3	1	116
Frontenac	W. Spankie, M.D.	1	16	43	27	1	3	11	154
Glengarry	D. McDiarmid, M.D.	2	17	36	12		6		85
Grey, E.	A. Grier	6	23	83	1				63
Grey, W.	H. H. Burgess, B.A.	7	47	39	10	1	1	1	106
Grey, S.	N. W. Campbell	8	57	57	7		4	2	135
Haldimand	Clarke Moses	9	40	52					101
Haliburton, etc.	S. Phillips, B.A.	5	11	6		1	68	11	85
Halton	J. S. Deacon	7	44	29	9				89
Hastings, N.	W. Mackintosh	10	28	51			22		118
Hastings, S.	J. Johnston	5	69	43	15		2	2	136
Huron, E.	D. Robb	5	55	59	3			1	123
Huron, W.	J. Elgin Tom	5	54	63	8				129
Kent, E.	Rev. W. H. G. Colles	5	51	26	8				90
Kent, W.	Robt. Park	5	67	34	17				123
Lambton, E.	C. A. Barnes, B.A.	9	68	49	1		2		129
Lambton, W.	D. D. Moshier, B.A.	4	63	52	2	1	1		123
Lanark	F. L. Michell, M.A.	1	71	51	36	3		9	185
Leeds and Grenville, 2	R. Kinney, M.D.	3	16	53	12		3	4	91
Leeds and Grenville, 1	Wm. Johnston, M.A.	3	25	52	11		4	3	98
Leeds and Grenville, 3	T. A. Craig	4	26	38	16				93
Lennox and Addington	F. Burrows	3	30	47	20	8	2	5	110
Lincoln	W. W. Ireland, B.A.	7	36	31	6	2	1		84
Middlesex, E.	P. J. Thompson, B.A.	5	53	53	1				112
Middlesex, W.	H. D. Johnson	5	51	50					106
Norfolk	H. Frank Cook, B.A.	5	48	51	14		2	8	128
Northumberland	A. Odell	4	66	59	4	1		1	136
Ontario, N.	Jas. McBrien	3	32	32	16		1		85
Ontario, S.	J. Waugh, B.A.	3	44	29	7	3		1	87
Oxford	W. Carlyle	9	108	57	7	5	1		187
Peel	A. Embury	3	46	41	6			1	97
Perth	W. Irwin, B.A.	5	74	62	4	1	1		147
Peterboro'	J. Coyle Brown	3	32	26	7	1	9	5	83
Prescott and Russell	W. J. Summerby	3	16	21	21		49	3	113
Prince Edward	G. D. Platt, B.A.	3	25	43	13			6	92
Renfrew	R. G. Scott, B.A.	2	36	41	55	1	32	12	181
Simcoe, N.	J. C. Morgan, M.A.	8	67	44	10			4	133
Simcoe, S. W.	Rev. T. McKee	9	40	67	5	2	3		127
Simcoe, E., etc.	I. Day, B.A.	1	18	45	21	1	30	2	118
Stormont	A. McNaughton	4	27	41	17		5	3	98
Victoria, E.	J. H. Knight	3	35	20	4			11	73
Victoria, W., etc.	W. H. Stevens, B.A.	4	30	36	6		21	9	117
Waterloo, 1.	T. Pearce	7	69	27	4		1		108
Waterloo, 2.	F. W. Sheppard	4	55	24	2	2	1		88
Welland	J. H. Ball, M.A.	7	52	62		5			126
Wellington, N.	D. Clapp, B.A.	6	45	47	10				108
Wellington, S.	J. J. Craig, B.A.	8	49	29				1	87
Wentworth	J. H. Smith	11	55	32	9				107
York, N.	A. B. Davidson, B.A.	4	53	45	2				104
York, S.	D. Fotheringham	12	121	17	3				153
Thunder Bay and R. R.	J. Ritchie	7	43	6	10		7	8	81
Algoma	L. A. Green, B.A.	5	35	12	5		13	29	99
Mantoulin	D. McNair	1	8	3			84	15	67
Nipissing, etc.	J. B. McDougall, B.A.	7	26	17	2		20	44	118
Perry Sound, W.	Rev. Geo. Grant, B.A.	6	15	6	11	2	42	23	118
Brantford		7	36	2					45
Guelph	Wm. Tytler, B.A.	9	24						33
Hamilton	W. H. Ballard, M.A.	48	90	9		7			154
Kingston	W. G. Kidd	5	41						46
London	C. B. Edwards, B.A.	15	99						114
Ottawa	J. C. Glashan, LL.D.	42	60						102

APPENDIX R.—*Continued.*

Inspectorate.	Inspector.	Teachers' Certificates.								Total.
		I. Prof. or Interim from Normal College.	II. Prof or Interim from one of Normal Schools.	III. Class Prof.	Renewals or extensions of III. Class.	Old Co. Board Certificates.	District.	Temporary.	Not reported.	
St. Thomas	S. Silcox, B.A.	3	33	5						41
St. Catharines	J. B. Grey	5	16			2				23
Stratford	J. Russell Stuart	5	21	1						27
Toronto	Jas. L. Hughes	10	463			5				569
Windsor and Walkerville	Robt. Meade, M.A.	6	33	7		1				47
Brockville	Jno. Connolly	2	21	1						24
Collingwood	D. McCaig	2	16	5				1		24
Peterborough	D. Walker, B.A.	5	30			1				36
R. C. Separate Schools	J. F. Power, M.A.	6	35	3 ^a	10				a147	233
	Wm. Prendergast, B.A.	6	50	10	9		3	10	a137	235
	M. O'Brien	1	71	21	5	1	6	7	a108	220
	T. Rochon, B.A.			18			106	53	a13	190
	D. Cheney		4	7			13	5	a16	45
Totals		613	3,976	2,682	624	56	535	336	592	9,414

^aNo Certificates.

APPENDIX S.—LIST OF CERTIFICATES ISSUED BY THE EDUCATION DEPARTMENT, 1904, ETC.

1. *Public School Inspectors.*

Christie, James Douglas, B. A.
 Cornish, George Augustus, B. A.
 Donaldson, William, B. A.
 Hedley, Robert Wesley, B. A.
 Madill, James Walter, B. A.

Martyn, Harold G., B. A.
 Minns, James Edward, B. A.
 Rymal, James William, B. A.
 Shaw, Robert, B. A.
 Smith, Herbert Hamilton, B. A.

2. *High School Principals and Specialists.*

Armstrong, Frank, B. A. (Mathematics).
 Balls, George Herbert, B. A. (Mathematics).
 Carefoot, George Anderson, B. A. (Science).
 Cornish, George Augustus, B.A. (Science).
 Crewson, Joseph William, B.A. (Classics).
 Davidson, John H., B.A. (Mathematics).
 Dobson, Percival Charles, B.A. (Classics).
 Donaldson, William, B.A.
 Emery, John Whitehall, B.A. (Science).
 Foucar, Walter K., B.A. (French and German).
 Graham, Louis Hartley, B.A. (Science).
 Green, Leslie Arnold, B.A. (Classics).
 Grnn, Daniel Wesley, B.A. (Mathematics).
 Hedley, James Walter, B.A. (Mathematics).
 Hobbs, Thomas, B.A. (Mathematics).
 Hodgson, Joseph Emerson, B.A.
 Jermy, Percy Thomas, B.A.
 Jones, Louis E., B.A.
 Kilmer, Ernest E. C., B.A. Science and Commercial).

Kingston, George Augustus, B.A.
 Macdonald, John Ford, M.A. (Classics).
 MacLean, Walter Inglis, B.A. (Classics).
 McDougall, James Brown, B.A. (Classics).
 Madill, Alonzo James, B.A., (Science).
 Merritt, Robert Norris, B.A. (Mathematics).
 Might, Lincoln, M.A. (Science).
 Mowat, Alexander, B.A. (English and History). Issued in 1903.
 Munro, Peter Fraser, B.A. (Classics).
 Nesbit, David Ashton, B.A. (English).
 Norris, Isaac Taylor, B.A. (Mathematics).
 Roberts, Thomas Henry, B.A.
 Scovell, Holland R., B.A. (English, History, French, German).
 Shaw, Robert, B.A. (Mathematics).
 Shepherd, Martin Ward, B.A.
 Simpson, Ernstein, B.A.
 Sissons, Charles Bruce, B.A. (Classics).
 Smeaton, William, B.A. (Science).
 Smith, Herbert Hamilton, B.A. (Science).
 Staples, Louis Edgar, M.A. (Science).
 Wood, Elmore Everton, B.A. (Mathematics).

3. High School Assistants and Specialists.

Bale, George Sidney, B.A. (English and Hist., French, German).
 Ball, Kathleen Hester (French and German).
 Cleary, Norah, B.A.
 Collins, Harry (Commercial).
 Conlin, Evelyn Elizabeth, B.A. (Moderns and History).
 Courtice, Samuel J., B.A. (Mathematics).
 Denyes, James Malcolm, B.A. (French and German).
 Dickey, Mary Ada, B.A. (Moderns and History).
 Ferguson, George Arthur.
 Grant, Christina Cameron, B.A. (Moderns and History).
 Grose, Carolyne.
 Gunn, Daniel Wesley, B.A. (Mathematics).
 Haviland, Hugh Johnston, B.A. (Classics).

Hawkins, Maud Mary, B.A. (English and Moderns).
 Hill, Mary Alpena.
 Hutchinson, Mary Riordan.
 Johnston, Lily Mae (Commercial).
 Keith, Arthur W., B.A. (Science).
 Libby, Minnie Fennessy, B.A. (French and German).
 Macdonald, Jessie Esther O.
 McNeely, Priscilla V. M., B.A. (Science).
 Martyn, Harold G., B.A. (Moderns and History).
 Morrison, Amy Mary, B.A.
 Pitcher, Winona J.
 Sine, Frederick.
 Taylor, Emma Jean, B.A.
 Trenaman, Mabel Natalie, B.A. (Moderns and History).
 Webster, Samuel Charles, B.A.
 Wood, Elmore Everton, B.A. (Mathematics).

4. Summary of Public School Teachers' Certificates.

	Male.	Female.	Total.
First Class.....	28	72	100
Second Class.....	14	168	182
Second Class (Interim).....	0	27	27
Third Class, per County Model School reports.....	287	810	1,097
Plantagenet bi-lingual Model School.....	5	12	17

NOTE.—Commencing September, 1903, there is only one session of the Normal Schools (September to June following.) The examinations are conducted by the respective Normal School staffs.

5. First Class Certificates.

Allan, Florence Mabel.
 Ashman, George H.
 Ballachey, Charlotte M.
 Relfry, Effie.
 Bigelow, Gertrude R.
 Bilsland, Mary J.
 Bloor, Minette.
 Bond, S. Leonara.
 Biennan, Jennie L.
 Briggs, Maude E.
 Buell, Nina Henrietta.
 Burns, Susie Mabel.
 Burpee, Elizabeth Leleah.
 Cameron, Allan A.
 Campbell, Ellen Jane.
 Carlyle, John A.
 Caughlin, Leonora.
 Chidley, Agnes.
 Cole, Agatha St. Osyth, B.A.
 Coleman, Kate B.
 Corrigan, Eugene.
 Craig, Elberta May.
 Craig, Margaret Evelyn, B. A.
 Currie, Mima Kate.
 Dixon, Mamie K.
 Dunn, Adelaide Teresa, B.A.
 Dunnett, Alfred.

Fwing, Florence May, B.A.
 Fuller, Royden John.
 Gilbert, Jessie M.
 Hamshaw, Irene J.
 Hayes, Blanche E.
 Henry, Edith May, B.A.
 Hickey, Philippa A. V.
 Hinds, Margaret J.
 Irwin, David Campbell.
 Jackson, Vincent W., B.A.
 Jenkins, Myrtle Mellaney.
 Kaine, John M.
 Kehoe, Teresa.
 Kitto, Maud M.
 Lawlor, Richard G., B.A.
 LeSueur, Evelyn Daisy.
 Livens, Emma.
 Lochhead, Laura Augusta.
 Lowe, John Griffith.
 McDermott, Mary Jane.
 McEwan, Alice M.
 McKinnon, Jessie Christine.
 McNab, G. Gibbon, M.A.
 McTaggart, Clara.
 Maybee, Edith Beatrice.
 Milburn, Walter.
 Miller, Janet.

5. *First Class Certificates.*—Continued.

Mills, Blanche Eliza.	Stephen, Margaret Shearer.
Mitchell, Christina.	Stewart, Alison (Miss).
Moffatt, Harriett E.	Stewart, Gertrude.
Mulloy, Lulu Eugenia.	Syer, Carrie Beatrice.
Pattinson, Nellie.	Taggart, Burton C.
Ralston, George D.	Tape, Mary Eloise.
Ramsay, William, B.A. (Honors).	Thompson, A. Lillian.
Richards, Florence Bertha.	Thompson, Helen Elizabeth.
Richardson, Etta A.	Thornhill, Jennie V.
Robertson, George A., B.A. (Honors)	Tuck, John Raphael.
Robinson, May R.	Tupling, F. Eva.
Russell, Fanny Josephine.	Urquhart, Edith Charlotte.
Rutherford, James Campbell.	Walker, Alice.
Schell, Arthur William.	Watson, James Livingstone, B.A.
Sealey, Ethel May, B.A.	Watt, Annie May.
Sexsmith, William Newton, B.A.	Weatherilt, Minnie.
Shaw, Bertha Mc.	Wightman, Stanley.
Shaw, Helen Harriet.	Wilkinson, Amy Florence.
Skitch, Ernest Fred.	Wilson, R. Albert, M.A.
Smith, Emma Ora.	Woodburn, Mayne.
Snider, Wilbert W.	Wright, Ethwell D.
Spence, Florence M.	Yake, John W.
Sprung, Whitfield Lyman, B.A.	Youngson, Mary, B.A.

6. *Second Class Certificates.*

(1) Interim second class certificates valid for two years. On proof of having taught successfully for one year thereon, the holder will be admitted to the final examination of the Normal School, and on passing will be awarded a permanent second class certificate.

Currie, Eva.	Mains, Alice.
Hanna, Muriel.	Miller, Beulah Helen.
Hurl, Eber.	Morrison, Janie F.
Lindsay, Nora Kathleen.	McHardy, Flora Margaret.
Lordan, Annie.	Wallace, Ada.

(2) Interim second class certificates valid for two years. On proof of having taught successfully for one year thereon, a permanent second class certificate will be issued.

Alexander, Muriel.	Lawson, Bessie Claire.
Benoit, Muriel Agnes.	MacGregor, Daisy.
Coughlin, Nona.	MacMurtry, Monah.
Craig, Minnie.	Manderson, Amy Isabel.
Campbell, Lily.	Masson, Jennie R.
Dwyer, Anna Beatrice.	Mullen, Mamie C.
Hamilton, Mayme.	Ockley, Laura.
Harvey, Mary Winnifred.	Perkins, Ina Godwin.
Hughson, Ida Rooker.	Pomery, Gertrude.
Irwin, Isabel.	Redmond, Annie Loretto.
Iveson, Sadie E.	Salter, Alice.
Jackson, A. Gertrude.	Shortt, Edith B.
Jewison, Bertha Louise.	Stanley, Edna.
Larocque, Valeda A.	Sloane, Anna Beresford.
Lloyd, Helen.	Thorne, Florence Alberta.
Lloyd, Hazel.	Weir, Evelyn Helen, B.A.
Lanphier, Jennie Agatha.	

(3) *Second Class Certificates.*

Allaster, Ethel. (Honors).	Baker, Ismay E.
Amos, Maggie. (Honors).	Blackwell, Harriet P.
Adams, Matilda. (Honors).	Broadbent, Lydia M.
Anderson, Mabel Beatrice.	Rest, Clara E.
Armstrong, Mildred K.	Burns, Mabel. (Honors).
Aird, Louisa.	Barlow, Annie.

(3) Second Class Certificates.—*Continued.*

Bielby, Margaret E.
 Black, Minnie May.
 Brand, Olga Winnona.
 Brown, Rachel.
 Burton, Ethel Lizzie.
 Boucher, Annie R.
 Campbell, A. Pearle.
 Chapman, Manty.
 Childs, May.
 Copeland, George F.
 Coulter, Amelia.
 Campbell, Ella Florence.
 Campbell, Nellie.
 Clark, Kate.
 Climie, Aggie Bethea.
 Cook, Bessie Mabel. (Honors).
 Carpenter, Mabel M.
 Casselman, Alice M.
 Cummins, George J.
 Doyle, Iva Campbell. (Honors).
 Devereaux, Grace Bessie.
 Dougan, Carrie Lillian.
 Downing, Cora Dell.
 Downes, Marguerite Anna.
 Dulmage, Mary.
 Davis, Letitia.
 Ellis, Mattie A. (Honors).
 Elliott, Lottie Florence. (Honors).
 Ellison, Daisy Lillian. (Honors).
 Ferguson, Jessie.
 Foy, Kathleen.
 Fraser, Barbara S.
 Guest, Edna.
 Grieve, Jean Edith. (Honors).
 Galbraith, Margaret I.
 Gardner, Mary Emma.
 Gay, Elizabeth Geddes.
 Gordon, Agnes Webster.
 Griffith, Anah Agatha.
 Grant, Mary M. (Honors).
 Gillespie, John H.
 Hagerman, Emma.
 Henderson, Christena. (Honors).
 Howard, Gertrude. (Honors).
 Hart, Mildred Noel.
 Hauck, Rose.
 Hillborn, Minnie Julia.
 Hinch, Edna Augusta.
 Huber, Julia Anna D.
 Huycke, Lulu Rosetta.
 Hamby, Ethel Edna. (Honors).
 Johnston, Alice M.
 Jardine, May Caroline.
 Jeffers, Charlotte May.
 Kehoe, Teresa.
 Kilbourne, Ethel M.
 Kirk, Florence May.
 Kenney, Gertrude E.
 Kottmeier, Margaret Louise. (Honors).
 Lee, Rebecca.
 Lonsberry, John D.
 Lowe, Jessie.
 Leach, Jessie Gould.
 Lediard, Mary Frances.
 Lousley, Ada Lucinda.
 Lucey, Bessie Wilkin.
 Lunan, Walter Clarence.
 Lewis, Mary.
 MacLachlan, Margaret. (Honors).
 Mackay, Harriet S.
 McAlpine, Isabelle.
 McBride, Ethel M.
 McCallum, Ethel Vivian.
 McGregor, Florence.
 McGregor, Milton.
 McCann, Margaret Isabel. (Honors).
 McColl, Edith Nina.
 McCordie, Ethel Maud.
 McCordie, Milton Truman.
 McDonald, Myrtle Jean.
 McGeough, Lillie.
 McLaughlin, Hattie.
 McMahon, Frank Oliver.
 McLaughlin, Robert E.
 Murdock, Jennie I. (Honors).
 Milburn, Mary.
 Mitchell, Katie.
 Morrow, Samuel J.
 Martin, Maggie Ann.
 Muir, Helen Wight.
 Murton, Lena.
 Marshall, Flora B. (Honors).
 Mattock, Maude.
 Mullen, Carrie T. (Honors).
 Neelands, May.
 Newton, Winnifred.
 Notter, Mabel.
 O'Leary, Annie.
 O'Leary, Ella.
 Paddell, Harry W.
 Padfield, Sara.
 Perry, Caro.
 Phoenix, Eleanor.
 Pigot, Blanche.
 Procutier, Clara. (Honors).
 Park, Ethel.
 Phillips, Clara M.
 Poppelwell, Maude.
 Richardson, Laura E.
 Ross, Margaret.
 Ripley, Ethel. (Honors).
 Risebrough, Harriet Wilbur.
 Ross, Mina.
 Ross, Wilmena Gordon.
 Reek, Lucy Ann. (Honors).
 Reid, William Thomas. (Honors).
 Roden, Isadore Evans. (Honors).
 Rush, Teresa. (Honors).
 Skinner, Lillian G. (Honors).
 Simpson, Laura G.
 Slaughter, Edward.
 Sloan, Lizzie.
 Smillie, Agnes.
 Smith, Lulu M.
 Stapleton, Helena.
 Smith, Lillie Jane. (Honors).
 Samson, Allie Edna.
 Scott, Minnie Ethel.
 Selway, Clara.
 Skelton, Minnie Maude.
 Sturgeon, Margaret E.
 Thomas, Lillian.
 Traynor, May Loretto.
 Turnbull, Jennie.

(3) Second Class Certificates.—*Concluded.*

Taylor, Agnes McDonald. (Honors).	Weese, Della Evalena.
Taggart, Anna Ethel. (Honors).	Wellwood, Eva Piritte.
Taughner, Lenore.	Welsh, Mary Catherine.
Upshall, Martha H.	White, Estella Isma.
Vining, Mary.	Wilson, Lizzie Helena.
VanValkenburgh, Georgia May.	Williamson, Frankie G. E. (Honors).
Waghorne, Rhoda.	Woods, Lizzie.
Wallace, Belle..	Wightman, Myrtle.
Walker, Ettie Winifred.	Wynn, Edith.
Washington, Ethel Beatrice.	York, Ida May.
Weber, Vina Corene.	

7. Kindergarten Directors.

Alexander, Minnie.	McVety, Spray L.
Allen, Lillian. (Honors).	Martin, Georgina. (Honors).
Ashton, Blanche.	Matthews, Mabel.
Baker, Ada H. (Honors).	Parker, Winifred.
Ballachey, Mary E. G.	Robinson, Nora.
Betzner, Wahnetta.	Robinson, Jean.
Cleaver, Mona.	Taylor, M. Aletha.
Cunningham, Mabel.	Thompson, Marion.
DeLaporte, Ethel W.	Ward, Ethel E. (Honors).
Denne, Edith May.	Watson, Edyth.
Feir, Euphemia.	Welch, Frances Emma.
Goulding, Lillian.	Wilcox, Caroline. (Honors).
Harding, Lillian B.	Wilson, Belle.
Kidney, Ethel.	Woods, Mamie. (Honors).
Lennox, Eleanor.	Yellowless, Florence.

8. Kindergarten Assistants.

Alcombrack, Lovella. (Honors).	Miller, Mary.
Allan, Anna Davidson.	Patillo, Olive.
Aull, Lelia.	Plummer, M. Inez.
Baker, Jessie C.	Pyfrom, R. Welhelmina. (Honors).
Batton, Edith. (Honors).	Reid, Jean Douglas. (Honors).
Bennett, Katherine E.	Ross, Elsie M.
Boggs, B. Emily. (Honors).	Seaman, Annie L. (Honors).
Cassidy, Irene.	Shackelton, Mary Dorothea.
Johnston, Elizabeth. (Honors).	Walker, Lily.
Legate, Anna H. (Honors).	Watson, Veva Alemena.
MacRitchie, Ida N. (Honors).	Wilcocks, Georgina. (Honors).
McCrea, Edith.	Wilson, Florence.
McLean, Aileen.	Wilson, Margaret K. (Honors).
Magwood, Mabel. (Honors).	

9. Certificates in Domestic Science.

Burgoyne, Clara E.	Henry, Mabel Alena.
Davidson, Mary Davidson.	Kingstone, Edith H.
Delaney, Addie.	Lewis, Esther Davis.
Eadie, Ethel M.	McCally, Ellen M.
Edmison, Marion.	Marshall, Isabel Currie.
Edwards, E. May.	Nesbitt, Anthos A. J.
Eilbeck, Winona M.	Reynar, Constance.
Ellis, Kate.	Tamblyn, Beatrice.

10. *Temporary and Extended Certificates.*

County, etc.	Temporary 1 certificates.	Third Class certificates extended.	County, etc.	Temporary 3 certificates.	Third Class certificates extended.
Brant	1	1	Middlesex	3	...
Bruce	14	...	Northumberland .....	...	1
Carleton	1	...	Prescott and Russell	7	1
Dundas	1	1	Renfrew	15	2
Elgin	1	...	Simcoe .....	...	1
Essex	17	1	Stormont	6	..
Frontenac	27	5	Victoria	2	1
Glengarry	20	...	Central Ontario R. C. S. Schools	8	3
Grey	5	..	Eastern Ontario R. C. S. Schools	3	1
Haliburton	10	2	Bilingual R. C. S. Schools	64	60
Hastings	10	1	Districts	86	3
Kent	6	..	Totals, 1904	343	93
Lambton	13	...	Totals, 1903	292	23
Lanark	13	2	Increase	51	65
Leeds	3	...			
Lennox and Addington	5	..			
Lincoln	2	2			

11. *Professional Examinations.*

	Kindergarten Assistants.	Kindergarten Directors.	Co. Model Schools.	Normal Schools.	Normal College.
No. of Candidates	39	33	1122	304	150
No. who passed	30	27	1097	*	146
No. of Appeals	4	1	.....	.....	9
App eals sustained	0	0	.....	.....	1

* In addition to the number of permanent Second Class certificates issued, as per Sec. 6 (3) of this Appendix, 43 received Interim Second class certificates, which will be made permanent in accordance with the conditions mentioned in Sec. 6 (1) and (2).

APPENDIX T.—MEMBERS OF THE EDUCATIONAL COUNCIL AND BOARDS OF EXAMINERS; LISTS OF ASSOCIATE EXAMINERS; AND HIGH SCHOOL PRINCIPALS AND ASSISTANTS.

I.—EDUCATIONAL COUNCIL, 1904-1905.

Prof. James Loudon, M.A., LL.D., President, Toronto University.
 Prof. Maurice Hutton, M.A., Principal, University College, Toronto.
 Prof. A. B. McCallum, B.A., M.B., Ph.D., Toronto University.
 Prof. Alfred Baker, M.A., Toronto University.
 Rev. J. R. Teefy, M.A., LL.D., Principal, St. Michael's College, Toronto.
 Rev. N. Burwash, M.A., LL.D., Chancellor, Victoria University, Toronto.
 Prof. A. P. Knight, M.A., M.D., Queen's University, Kingston.
 W. Pakenham, B.A., D.Pæd., Principal, Technical High School, Toronto.
 Rev. O. C. S. Wallace, M.A., D.D., LL.D., Chancellor, McMaster Uni., Toronto.
 R. H. Cowley, Esq., M.A., Inspector of Schools for Carleton Co., Ottawa.
 F. C. Colbeck, Esq., B.A., Principal, Coll. Institute, Toronto Junction.
 David Young, Esq., Principal, Public Schools, Guelph.

II. BOARDS OF EXAMINERS, 1905.

(1) *District Certificate Board.*

W Mackintosh, I. P. S. Madoc.
 S. Phillips, B.A., I. P. S. Minden.
 D. Robb, B.A., I. P. S. Brussels.
 H. I. Strang, B.A., Prin. Coll. Inst. Goderich.
 W. W. Rutherford, B.A., Prin. Coll. Inst. Aylmer.

(2) High School Leaving and University Matriculation Board.

Alexander, W. J., Ph. D.	Toronto University.
Allan, F. B., Ph. D.	Toronto University.
Bensley, B. A., Ph. D.	Toronto University.
Ballard, W. H., M. A.	Public School Inspector, Hamilton.
Edgar, Pelham, Ph. D.	Victoria University.
Fletcher, J., LL. D.	Toronto University.
Marshall, J., M. A.	Queen's University.
McKay, A. C., LL. D.	McMaster University.
McLennan, J. C., Ph. D.	Toronto University.
McNaughton, J., M. A.	Queen's University.
Prendergast, W., B. A.	Separate School Inspector, Toronto.
Robertson, J. C., M. A.	Victoria University.
Squair, J., B. A.	Toronto University.
Toews, P., Ph. D.	Toronto University.
Tytler, W., M. A.	Public School Inspector, Guelph.

(3) Commercial Specialist Board.

K. Davidson	Normal School, London.
J. A. Dobbie	Normal School, Ottawa.
G. L. Johnston, B.A.	Hamilton.
Jessie C. McRae	Belleville.
J. H. Packham, B. A.	Owen Sound.

(4) High School Entrance Board.

I. M. Levan, B. A.	Woodstock.
D. D. Moshier, B. Pæd.	Sarnia.
D. M. Walker, B. A.	Peterboro'.

III. ASSOCIATE EXAMINERS FOR DEPARTMENTAL EXAMINATIONS, 1904.**(1) District Certificate Examination.**

<i>English Grammar and Dictation.</i>	<i>English Composition.</i>
McManus, E.	Lewis, T. N.
Sparks, W. F.	<i>Arithmetic.</i>
<i>History.</i>	Graham, W. A.
Putman, J. H.	<i>Algebra.</i>
<i>Geography.</i>	Murray, R. W.
Shier, W. C.	<i>Geometry.</i>
<i>English Literature.</i>	Fairchild, A. H.
Robinson, J. B.	

(2) Junior Leaving and Junior Matriculation.

<i>Experimental Science, Physics and Chemistry).</i>	<i>English Composition.</i>
Cozens, A.	Bale, G. S.
Donaldson, W.	Burnham, A. B.
Hamilton, R. S.	Duff, J.
McMurchy, N.	McPherson, Hattie G.
Pugsley, E.	Morrison, Amy.
	Redditt, T. H.
	Simpson, H. C.
<i>English Literature.</i>	<i>English Grammar and Rhetoric.</i>
Asman, H. O. E.	Asselstine, R. W.
Ball, Kathleen.	Carter, Esle.
Barr, Janet.	Downey, Helen.
Cleary, Norah.	French, B.
Elliott, T. E.	Gibbard, A. H.
Jeffries, J.	Hawkins, Maud.
Kemp, W.	Hemstridge, Eliza.
Macdonald, Helen.	Jamieson, J. S.
Macdonald, Jean.	McKinnon, C.
Martin, J. S.	Malcolm, G.
Meiklejohn, A. J.	Taylor, Emma J.
Race, W. B.	
Rose, Marion.	<i>Algebra.</i>
Wetherell, J. E.	Anglin, R. W.

III. ASSOCIATE EXAMINERS FOR DEPARTMENTAL EXAMINATIONS, 1904. — *Concluded.*(2) *Junior Leaving and Junior Matriculation.*—*Con.**Algebra.*—*Con.*

Auld, C.
Gourlay, R.
Hedley, R. W.
Hogarth, G. H.
Keith, G. W.
Massey, A. W.
Wellwood, N. J.

Dunkley, A. W.
Findlay, W. A.
Freeman, J. A.
Grant, D. M.
McVicar, A.
Marshall, J. W.
Sait, E. M.
Stothers, R.

Geometry.

Brown, P. W.
Cameron, J. S.
Colling, G. F.
Cox, J. L.
Forbes, J. W.
Graham, R. J.
Gunn, D. W.
Harvey, Martha A.
Kirkconnell, T. A.
Merritt, R. N.
White, E. T.

Arithmetic and Mensuration.

Bell, Ethel.
Courtice, S. J.
Davidson, J.
Montizambert, J. R.
Nichol, W. W.
Norris, I. T.
Powell, E. G.
Robertson, G. D.
Seaton, E. T.
Strath, R. S.

Physics.

Clark, H. J.
Fletcher, W. H.
Gill, J.
Hamilton, W. J.
Ivey, T. J.
Lehmann, C.
McDougall, N.
McNeilly, Priscilla.
Sexton, J. H.
Smeaton, W.
Voaden, J.

Classics.

Bell, J. J.
Bell, W. N.
Bryan, H. W.
Dobson, P. C.
Fenton, W. J.
Morrow, A. E.
Reilly, F. J.
Riddell, F. P.
Sawers, F. J.
Teskey, Edith A.
Wright, W. J.

Chemistry.

Cohoe, W. P.
Donaldson, W.
Forbes, W. B.
Kirkland, W. S.
Knox, R. H.
McCreedy, S. B.

French and German.

Clothier, J. G.
Cook, Margaret.
Day, A. E.
Denyes, J. M.
Graham, P. E.
Jones, Laura.
Macdougall, Isabel J.
Marty, Aletta E.
Marty, Sophie.
Mills, Martha C.
Reynar, Marianne B.
Tamblyn, W. F.

Ancient History.

Barron, R. A.
Burt, A. W.
Dandy, W. P.
Deroche, Eleanor E.
Dolan, J. H.

(3) *Senior Leaving and Honor Matriculation.**English Literature and Composition.*

Christie, J. D.
Foucar, W. K.
Houston, J.
Lawler, Gertrude.
Walks, R. H.

Science.

Hill, E. L.
Piersol, W. H.
Whyte, D.

History.

Glassey, D. A.
Hoag, J. P.

Classics.

Colling, J. K.
Croakery, R. A.
Passmore, S. F.
Smith, George O.
Smith, L. C.
Twohey, W. J.

Mathematics.

Cornwall, J. L.
DeGuerre, A.
Little, J. G.
Robertson, H. S.
Stanley, T. E. A.

French and German.

Balmer, Eliza M.
Clark, D. K.
Dales, J. N.
Hogarth, E. S.
Lane, J. S.

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.

Collegiate Institutes.	Names of teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
Aylmer	Rutherford, Walter W. Kilmer, Ernest E. C. Munro, Peter Fraser Story, Selina Gladyst (Interim)	B. A., Tor. B. A., Queen's B. A., Queen's, B. Ped., Tor. M. A., Queen's	Math. Commercial, Sci. Class. Moda. and Hist.	1883 1899 1903 1904	1,400 1,000 900 750
Barrie	Redditt, Thomas H. Hay Andrew Moir, Mary Annie Morrison, A. Selkirk Mackay, Donald Alexander	B. A., Tor. B. A., Queen's B. A., Queen's	Eng., Hist., Fr., Gr. Math. Commercial Eng. Hist. Sci.	1893 1882 1895 1905 1905	1,500 1,000 750 900 900
Berlin	Forsyth, David Jackman, David S. Dolan, George Robert Norman, Lambert Martyn, Harold G. Albanus, Miss Hedwig S. Houston, D. W. Fisher, Katharine A.	B. A., Tor. M. A., Tor. B. A., Queen's B. A., Tor. B. A., Tor. B. A., Tor. B. A., Tor.	Math. Sci. Eng., Hist., Class. Com. (Interim) Eng. Hist., Fr. Ger. Moda. and Hist. Fr. Ger. (Manual Training Instructor) (Household Science Instructor)	1901 1902 1904 1904 1904 1904 1903 1903	1,500 1,050 1,000 1,050 900 850 1,000 600
Brantford	Burt, Arthur William Passmore, Samuel F. Hoag, James P. Coates, Daniel Harsum Bunnell, Effie Maria Shultis, Adam Gundry, Arthur Presland	B. A., Tor. M. A., Tor. B. A., Queen's B. A., Tor. B. A., Tor. B. A., Tor.	Eng., Hist., Fr., Gr. Class. Eng. Hist., Math. Math. Eng., Hist., Fr., Ger. Commercial Sci.	1893 1885 1893 1893 1891 1896 1904	1,800 1,200 1,200 1,200 1,200 1,200 1,000
Brockville	Mowat, Alexander Bryan, Hugh Wallace Husband, Almeron Judson Forbes, John W. Emery, John Whitehall Giles, A. Edith Richardson, Kate Hopkins, Walter E.	B. A., Tor. M. A., Queen's B. A., Tor. B. A., Tor. B. A., Tor. B. A., Tor.	Eng. Hist. Class. Eng. Hist., (Interim) Fr., Ger. Math. Commercial (Interim) Sci. Commercial	1901 1901 1895 1902 1904 1890 1898 1904	1,550 1,050 1,050 1,050 1,000 750 750 600

Chatham	Twohey, William J. Paterson, David Smith Taylor, Wilson Jewett, Albert E. Lane, James Stanley Collins, Henry Jennings, Edwin William (Interim) Lafferty, Effie (Interim) Thompson, Peter M.	M. A., Tor B. A., Tor B. A., Tor B. A., Queen's B. A., Tor B. A., Tor B. A., Tor B. A., Tor M. A., Queen's	Class. Eng., Hist., Fr., Ger Math. Sci. Fr., Ger Commercial Sci. Eng., Hist., Fr. Ger Sci. Math Commercial	1904 1898 1894 1896 1898 1902 1904 1903 1904	1,400 1,250 1,250 1,260 1,075 1,250 500 800
Clinton	Houston, John McLean, Ebenezer M McKinnon, Charles (Interim) Cranston, David London (Interim) Johnstone, Lily Mae	M. A., Tor B. A., Tor B. A., Tor B. A., Tor	Eng., Hist., Fr. Ger Sci. Math Commercial	1892 1894 1904 1904 1903	1,225 950 900 750 750
Cobourg	Mitchell, George Winter Arthur, Colin Clayton Odell, John William Jones, Laura L. Anderson, Frank Cecil	M. A., Queen's M. A., Queen's B. A., Tor B. A., Tor B. A., Queen's	Class. Sci. Math. Eng., Hist., Fr., Ger Com. (Interim), Sci.	1891 1893 1895 1898 1904	1,425 1,000 1,000 800 1,000
Collingwood	Mills, George K. Hammill, George Colling, John Knowles Stone, Alice B. (Interim) Cole, Agatha St. Osyth (Interim)	B. A., Tor B. A., Tor B. A., Tor B. A., Tor B. A., Tor	Sci. Math. Class. Commercial Mods. and Hist.	1901 1892 1899 1902 1905	1,400 1,050 950 700 650
Galt	Carscadden, Thomas DeGuerre, Ambrose Evans, William Edwin Hamilton, Robert S. Carter, Janet Wishart Morrow, Archibald Elston	M. A., Tor B. A., Tor B. A., Tor M. A., Tor B. A., Tor	Eng., Hist. Math. Commercial Sci. Eng., Hist., (Interim), Fr., Ger Class.	1885 1890 1892 1894 1901 1905	1,750 1,200 1,100 1,200 950 1,100
Goderich	Strang, Hugh Innis Field, John M. Merritt, Robert Norris Willson, Herbert George (Interim) Parlee, Edith Bailey, Joseph J. (Interim)	B. A., Tor B. A., Tor B. A., Tor B. A., Tor	Class. Eng., Hist., Fr., Ger Math. Sci. Commercial	1871 1900 1902 1904 1903 1903	1,300 1,000 950 850 800 700
Guelph	Davison, James Hill, Ethelbert Lincoln Skinner, Kate Clara	B. A., Vic B. A., Tor B. A., Tor	Math. Sci. Eng., Hist., Fr., Ger	1892 1889 1895	1,500 1,100 900

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—*Continued.*

Collegiate Institutes.	Names of teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
					\$
Guelph— <i>Con.</i>	Glassey, David Alex.	B. A., Tor.	Class.	1903	1,100
	Charlesworth, John William.			1888	950
	Taylor, Luther William.		Commercial.	1902	1,050
	Hughes, Frank Joseph. (Interim)		Commercial.	1904	650
Hamilton	Thompson, Robert Allan.	B. A., Tor.	Math.	1886	2,000
	Turner, John Burgess.	B. A., Queen's.	Math., Science.	1885	1,600
	Paterson, Andrew.	M. A., Trin.		1874	1,200
	Crawford, John Thomas.	B. A., Tor.	Math.	1889	1,400
	Logan, William McGregor.	M. A., Tor.	Class.	1892	1,400
	Hogarth, Eber Septimus.	B. A., Tor.	Eng., Hist., Fr., Ger.	1892	1,400
	MacPherson, Fred'ck Fotheringham.	B. A., Tor.	Eng., Hist., Fr., Ger.	1894	1,400
	Gill, James.	B. A., B. Ped., Tor.	Math.	1892	1,200
	Morgan, Sydney Albert.	B. A., D. Ped., Tor.	Class.	1891	1,200
	Asman, Henry Oldrid Evison.	B. A., London, Eng.		1891	1,100
	Loughead, William James (Interim)	M. A., Tor.	Math.	1904	900
	Johnston, George Lang.	B. A., Queen's.	Commercial.	1888	900
	Bale, George Sydney.	B. A., Tor.	Eng., Hist., Fr., Ger.	1904	800
	McArthur, Edith Mary.			1901	550
	Taylor, Mabel Annie. (Interim)	B. A., Queen's.		1904	550
	Kraft, Ernestine Lisette. (Interim)			1904	500
	Parkhill, Thomas Edward.		(Drill Instructor).	1898	650
	Macpherson, Mary Constance.	B. A., Queen's.	(Domestic Science Instructor).	1903	750
Ingersoll.	Briden, William.	B. A., Queen's.	Class., Eng.	1886	1,300
	Macdonald, George Leslie.	B. A., Tor.	Eng., Hist., Fr., Ger.	1895	1,000
	Cameron, John Shaw.		Math.	1898	1,000
	Sexton, James Henry.	M. A., Queen's.	Sci.	1902	1,000
	Hatch, Salem B.		Commercial. (Interim)	1904	900
	Lucas, Gavin A. (Interim)	B. A., Tor.	Commercial.	1904	900
Kingston	Ellis, William Stewart.	B. A., B. Sc. Vic.	Math., Sci.	1893	1,800
	Slitor, Ernest Oscar.	M. A., Tor.	Class.	1888	1,225
	Dalea, John Nelson.	M. A., Tor.	Eng., Hist., Fr., Ger.	1889	1,225
	Stiles, William Ryerson.	M. A., Queen's.	Math.	1897	1,200
	Ward, William.	B. A., Queen's.	Commercial.	1898	1,000

Duff, James.	M. A., Queen's.	Eng., Hist.	1898	1,050
Staples, Louis Edgar.	M. A., Queen's.	Sci.	1902	800
Folk, Henry J.		Fr., Ger. (Interim)	1904	700
Ramsay, William.	B. A., Queen's.	Class.	1904	800
Fraser, James W.	B. A., Tor.		1904	700
Galbraith, John E.			1904	700
Chown, Hattie Louise.			1905	700
Hatch, Augustus F.	B. A., Bowdoin.	(Manual Training Instructor)	1903	1,000
Harstone, John C.	B. A., Tor.	Math.	1886	1,600
Cornish, George Augustine.	B. A., Tor.	Sci.	1903	1,000
Rosevear, Howard Stanley.	B. A., Tor., M. A., Harvard.	Sci.	1903	1,050
Colling, James.	B. A., Tor.	Class.	1894	1,150
Wulke, Robert H.	B. A., Tor.	Eng., Hist.	1904	1,000
Willson, Alice M.	B. A., Tor.	Fr., Ger.	1904	900
McNab, Elizabeth M.	M. A., Queen's.		1904	700
Radcliffe, Samuel John.	B. A., Tor.	Eng., Hist., Fr., Ger.	1891	2,000
Little, Robert A.	B. A., Tor.	Class.	1886	1,500
Ferguson, William Chalmers.	B. A., Tor.	Eng., Hist., Fr., Ger.	1892	1,350
McCool, John.	M. A., Tor.	Eng., Hist., Fr., Ger.	1897	1,225
McCready, Samuel B.	B. A., Tor.	Sci.	1898	1,225
Govenlock, William M.	B. A., Tor.	Math.	1898	1,200
Wilson, Nicholas.			1898	1,050
Andrus, Guy A.			1888	1,150
McVicar, Archibald.	B. A., Tor.	Eng., Hist.	1903	1,150
Riddell, Frank P.	B. A., Tor.	Class.	1898	1,100
Jones, Samuel S.			1902	1,050
Dickenson, James Arthur.		Commercial.	1895	1,100
McCutcheon, Fred'ck Wm. Caswell.	B. A., Tor.	Fr., Ger. (Interim), Math., Eng., Hist.	1900	1,100
Downing, John Henry.			1900	1,025
Stuart, Frederick Alfred.	M. A., Tor.	Sci.	1903	1,025
Mooney, William H. Thos. (Interim)	B. A., Tor.	Class.	1903	1,025
Gray, Neil Roy.	B. A., Tor.	Moda. and Hist.	1904	1,000
Kelso, Alice C.			1897	850
McDonald, Jessie.	B. A., Tor.	Moda. and Hist. (Interim)	1904	800
Davidson, S. Kelso.		(Art Instructor)	1887	650
Gregory, William.		(Drill Instructor)	1902	600
McIntosh, Christine.		(Domestic Science Instructor)	1902	400
Jamieson, James Smyth.	M. A., Vic.	Eng., Hist.	1882	1,300
Masey, Arthur Wallace.	B. A., Vic.	Eng., Hist., Math.	1892	950
Saunders, William John.	M. A., Queen's.	Sci.	1903	900
Labby, Minnie Fennessy.	B. A., Vic.	Eng., Hist., Fr., Ger.	1903	800
Buchanan, John Alexander (Interim).		Commercial.	1902	800

Lindsay.

London.

Morrisburg.

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—Continued.

Collegiate Institutes.	Names of teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
Morrisburg—Con.	Cooke, John Alexander	B.A., Queen's	Class.	1904	\$ 900
Napanee	Flach, Ulysses J.	M.A., Tor.	Math.	1900	1,400
	Reid, Marvin Ryckman	M.A., Queen's	Sci.	1900	900
	Croskery, Robert Arthur	B.A., Queen's	Class.	1903	900
	Henry, Edith May	B.A., Tor.	Mod. and Hist.	1904	800
	Nicol, Margaret A.			1892	800
	Smith, Margaret			1892	800
Niagara Falls	Dickson, James D.	B.A., Tor.	Math.	1893	1,500
	Walker, David McKenzie		Commercial.	1893	1,100
	Fleming, Ethel Katharine	B.A., Tor.	Mod. and Hist.	1900	1,000
	Will, George Edwin	B.A., Tor.	Class.	1901	1,100
	Vosden, John	M.A., Queen's	Sci.	1903	1,000
	Dobbie, Mary I. (Interim)			1900	500
Orillia	Dickson, John Elder	B.A., Tor.	Class., Eng.	1898	1,500
	Doidge, Thomas Clarke	B.A., Tor.	Math., Commercial.	1899	1,000
	Madill, Alonzo James	B.A., McMaster	Sci.	1905	850
	Scratch, Linnie May		Sci., Com.	1905	800
	Elliott, Robert Leopold			1901	700
	Grant, Christine Cameron	B.A., Tor.	Mod. and Hist.	1903	700
Ottawa	McDougall, Alexander Hiram	B.A., Tor.	Math.	1899	1,900
	Macmillan, John	B.A., Tor.	Eng., Hist.	1894	1,800
	Jolliffe, Orion John	M.A., Vic.	Class.	1894	1,800
	Marty, A etta Elise	M.A., Queen's	Fr., Ger.	1903	1,275
	Sykes, William John	B.A., Vic.	Eng., Hist., Fr., Ger.	1894	1,750
	Stothers, Robert	B.A., Queen's		1887	1,400
	Norris, Isaac Taylor	B.A., Queen's	Math.	1898	1,300
	Campbell, Daniel Alexander	B.A., Tor.	Sci.	1896	1,575
	Graham, William Andrew	B.A., Tor.		1895	1,150
	Scott, Bessie Mabel	M.A., Tor.	Mod. and Hist.	1892	950
	Armstrong, William Glenochile		Commercial	1900	950
	Finlayson, Robert M.	M.A., Tor.		1902	1,000
	Finlay, James Walter	M.A., Tor.		1904	1,000

Owen Sound.....	Ewing, William Campbell.....	M.A., Queen's.....	Sci.....	1905	900
	Tomkins, Elizabeth Augusta.....	R.A., Queen's.....	Sci.....	1902	800
	Leibner, Ernest Oscar.....			1903	860
	Murray, Thomas.....	B.A., Tor.....	Math.....	1897	1,550
	Packham, James Henry.....	B.A., Vic.....	Math., Commercial.....	1894	1,200
	Whyte, David.....	B.A., Tor.....	Sci.....	1902	1,150
	McKellar, Herbert S.....	B.A., Tor.....	Fr., Ger.....	1898	1,450
	Howard, Edwy S.....	B.A., Vic.....	Eng., Hist.....	1902	1,150
	Brown, Lyman.....	M.A., Tor.....	Class.....	1903	1,100
	VanEvery, John F.....	B.A., Tor.....	Eng., Hist., Fr., Ger.....	1903	1,100
Perth.....	Shields, Alfred J.....			1903	800
	Dowkes, William J.....	(Interim)		1903	800
	Hardie, William.....	B.A., Tor.....	Class.....	1899	1,300
	Edmiston, James Alfred.....			1893	850
	Preston, Thomas.....	B.A., Tor.....	Sci.....	1903	900
	McKim, William Andrew.....	B.A., Tor.....	Eng., Hist., Fr., Ger.....	1900	900
	Patterson, William John.....	M.A., Queen's and Clark.....	Math.....	1903	1,000
	Feesenden, Cortez.....	M.A., Trin.....	Math.....	1890	2,000
	Fife, James A.....	B.A., Tor.....	Math, Sci.....	1887	1,200
	Jeffries, John.....	B.A., Tor.....	Eng., Hist., Fr., Ger.....	1890	1,200
Peterborough.....	Kenner, Henry R. H.....	B.A., Tor.....	Class.....	1893	1,200
	Strigley, Edgar Cooper.....		Commercial.....	1902	1,040
	Hodgson, Joseph Emerson.....	B.A., Tor.....	Sci. (Interim).....	1905	1,000
	Weir, Annie.....	B.A., Tor.....	Eng., Hist., Fr., Ger.....	1904	1,000
	McDowell, Charles.....	B.A., Queen's.....	Math.....	1879	1,200
	Berlanquet, Hugh S.....	B.A., Queen's.....	Class.....	1904	800
	Smith, Arthur.....	B.A., Tor.....	Sci.....	1904	800
	Bennett, Alice Maud.....	B.A., Tor.....	Moda. and Hist.....	1902	650
	McRae, Donella Maud.....	B.A., Queen's.....	Moda. and Hist.....	1903	550
	Reesor, Lillian M.....		Commercial.....	1904	700
Ridgetown.....	Bowditch, Florence.....		(Domestic Science Instructor).....	1902	650
	Little, John George.....	B.A., Tor.....	Math.....	1889	1,300
	Reid, Robert.....	B.A., Tor.....	Eng., Hist., Fr., Ger.....	1895	930
	Henderson, Jas. Van Wyck(Int'rim)	B.A., Tor.....	Class.....	1903	800
	Robertson, Geo. Alexander(Int'rim)	B.A., Tor.....	Sci.....	1904	800
	White, Kate Elizabeth.....			1905	600
	Henderson, John.....	M.A., Tor.....	Class., Eng., Hist.....	1872	1,600
	Robertson, William John.....	B.A., Tor., LL.B., Vic.....	Math.....	1874	1,200
St. Catharines.....					

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—Continued.

Collegiate Institutes.	Names of teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
St. Catharines— <i>Con.</i>	Giffin, James A.....	B. A., LL. B., Tor.	Sci.....	1892	\$ 1,100
	Cloney, Sara Louisa.....	M. A., Queen's.....	Eng., Hist., Fr., Ger.....	1896	1,000
	Laing, Arthur Stewart.....		Commercial.....	1898	900
	Stevenson, William John.....			1892	750
	Caverhill, Arthur E.....			1894	750
St. Mary's.....	Martin, Stephen.....	B. A., Tor.....	Math.....	1886	1,350
	Pearson, Alexander.....	B. A., Tor.....	Sci.....	1903	950
	Dobson, Percival Charles.....	B. A., Tor.....	Class.....	1904	900
	Wilkinson, James Egerton (Interim).....			1904	700
	Conlin, Evelyn Elizabeth.....	B. A., Tor.....	Mods. and Hist.....	1904	800
St. Thomas.....	Quance, Noah.....	B. A., Tor.....	Class.....	1891	1,500
	Stevenson, Orlando John.....	M. A., D. Ped., Tor.....	Eng., Hist., Fr., Ger.....	1897	1,200
	Lees, Richard.....	M. A., Queen's.....	Sci.....	1894	1,200
	Voeden Arthur.....		Commercial.....	1903	1,200
	McGee, Cyril Houghton.....	B. A., Trin.....	Math.....	1902	1,100
	Whitely, Lester Robert.....	B. A., Tor.....	Mods. and Hist.....	1901	850
	Gunn, Daniel Wesley.....	B. A., McMaster.....	Math.....	1904	850
	Webster, Charles Samuel.....	B. A., Tor.....		1902	700
	Cook, Margaret.....	M. A., Tor.....	Eng., Hist., Fr., Ger.....	1903	1,050
	Walker, Arthur J..... (Interim)			1903	650
Sarnia.....	Crassweller, Christopher L.....	B. A., Tor.....	Math.....	1902	1,400
	Grant, David M.....	B. A., Tor.....	Class.....	1885	1,300
	Burnham, Archibald Mowbray.....	B. A., Tor.....	Eng., Hist., Fr., Ger.....	1904	1,000
	Dent, William Arthur.....		Sci.....	1904	1,000
	Fleming, Ethel May.....	B. A., Tor.....	Mods. and Hist. (Interim).....	1902	900
	Bridgman, Clara Mary.....		Commercial (Interim).....	1902	750
	Jones, Louis E.....	B. A., Tor.....		1904	650
Seaforth.....	Rogers, George F.....	B. A., Vic.....	Sci.....	1900	1,225
	Kirkwood, Florence Ethel.....	B. A., Tor.....	Class.....	1901	925
	Brown, Henry William.....	B. A., Tor.....	Eng., Hist., Fr., Ger.....	1901	925
	Colling, George Featherstone.....	B. A., Tor.....	Math.....	1901	925
	Miller, Nannie Mary Augusta.....		Commercial (Interim) Eng., Hist.....	1903	775

Stratford	Mayberry, Charles Alexander	B. A., LL. B., Tor	Class	1,650
	Robertson, Hugh S	B. A., Tor	Math	1,200
	Lennox, Thomas H	B. A., Tor	Sci	1,100
	Stevenson, Andrew	B. A., Tor	Eng., Hist	1,000
	Malcolm, George	B. A., Queen's	Eng., Hist., Fr., Ger	1,000
	Marty, Sophie E.	M. A., Queen's	Commercial	900
	Robertson, George D	B. A., Queen's	(Manual Training Instructor) (Interim)	850
	Adams, W. A.		Domestic Science Instructor	500
	Lewis, Esther			
Strathroy	Wetherell, James Elgin	B. A., Tor	Class, Eng., Hist	1,500
	Auld, Charles	B. A., Tor	Math	1,050
	Conn, Henry	B. A., Tor	Sci	1,000
	Kent, Eleanor		Commercial	800
	Sealey, Ethel May	B. A., Tor	Moda. and Hist.	750
Toronto (Harbord St.)	Spotton, Henry Byron	M. A., Tor	Class, Sci	2,900
	Higarty, Edward William	B. A., Tor	Class	1,900
	Balmer, Eliza May	B. A., Tor	Eng., Hist, Fr., Ger	1,900
	Lawler, Gertrude	M. A., Tor	Eng., Hist., Fr., Ger., Math	1,900
	Smyth, Thomas Henry	M. A., Tor	Sci	1,900
	Cox, John Loane	B. A., Tor	Math	1,900
	Forfar, Charles	B. A., Tor	Eng., Hist., Fr., Ger	1,500
	Kennedy, Lyman Aaron	B. A., Tor	Eng., Hist.	1,500
	Strath, Robert Smith	B. A., Tor	Math. (Interim)	1,500
	Clark, Luther J	B. A., Queen's	Eng., Hist	1,450
	Carstairs, John Stewart	B. A., Tor	Eng., Hist	1,350
	Horton, Charles W.	B. A., Queen's	Eng., Hist	1,050
	Moore, James Rosington	M. A., Queen's	Sci	1,050
Toronto (Jameson Ave.)	Embree, Luther Edmund	M. A., Tor	Class, Eng., Hist., Fr., Ger	3,000
	Smith, Gilbert Acheson	B. A., Tor	Sci	2,000
	Hillock, Julia S	B. A., Tor	Fr., Ger	1,650
	Birchard, Isaac J	M. A., Tor	Math	1,900
	Crawford, Henry J	B. A., Tor	Class	1,900
	Millar, James			
	Spence, Nellie	B. A., Tor	Class, Eng., Hist	1,800
	Sinclair, John	B. A., Tor		1,450
	Watson, Ervin H. A	B. A., Tor	Moda. and Hist.	1,050
	Cosens, Absalom	M. A., Tor	Sci	1,050
Toronto (Jarvis St.)	Manley, Frederick Fitzpayne	M. A., Tor	Math	2,800
	Chase, George A	M. A., Tor	Eng., Hist., Fr., Ger	1,900
	Gray, Robert Alexander	B. A., Tor	Math	1,550
	Shaw, George Edmund	B. A., Tor	Eng., Hist., Fr., Ger	1,900

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—Continued.

Collegiate Institutes.	Names of teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
					\$
Toronto (Jarvis St.)— <i>Con.</i>	Michell, William C	B. A., Tor	Class	1897	1,550
	Gundy, Henry Wentworth	B. A., Tor	Class	1900	1,250
	Lehmann, Carl	B. A., Tor	Sci	1898	1,550
	Thomas, Janie	B. A., Tor	Eng., Hist.	1882	1,450
	Wightman, Robert	B. A., Tor	Math	1902	1,000
	Clarke, Fred Hall	B. A., Tor	Eng., Hist., Fr., Ger	1904	1,000
	Ivey, Thomas Jayne	M. A., Tor	Sci	1904	1,000
Toronto Junction.	Colbeck, Franklin Charles	B. A., Vic	Class., Eng., Hist.	1894	1,800
	Gourlay, Richard	B. A., Tor	Class., Math	1893	1,400
	Charles, Henrietta	B. A., Tor	Eng., Hist., Fr., Ger	1900	1,100
	Johnston, Frederick James	M. A., Tor	Sci	1904	1,100
	Barnes, Charles Lancelot. (Interim)	B. A., Tor	Class	1902	800
	McLellan, Catharine		Commercial (Interim)	1903	750
	Evans, William Arthur			1904	700
Vankleek Hill	Jamieson, Thomas	B. A., Vic	Math	1889	1,100
	Haviland, Hugh Johnston	B. A., Tor	Class	1904	800
	McLaurin, Peter C. (Interim)	B. A., McMaster	Sci	1902	850
	Trenaman, Mabel Natalie	B. A., Tor	Mods. and Hist.	1905	600
	Jamieson, Clinton Egerton. (Interim)		Commercial	1904	600
	Hogarth, George Henry	B. A., Tor	Math	1899	1,150
	Denyes, J. Malcolm	B. A., Queen's	Fr., Ger	1903	800
Whitby	Forbes, William Brownie		Sci	1903	800
	Deroche, Eleanor Elizabeth	B. A., Tor	Class	1903	700
	Gibbard, Alexander Hannah	B. A., Tor	Eng., Hist., Fr., Ger	1904	800
	Gavin, Frederick Pearce	B. A., Queen's	Sci	1892	1,600
	Bell, Frederick Henry	B. A., Tor	Eng., Hist., Fr., Ger	1898	1,200
	Messmore, Joseph Franklin	B. A., Tor	Class	1899	1,100
	Neilson, James		Commercial	1898	1,100
Windsor	Taylor, John Gladstone	B. A., Tor	Math	1903	1,100
	Marshall, John Wells	B. A., Queen's	Class	1903	1,000
	Cleary, Norah	B. A., Tor		1900	800
	Keith, Arthur W	B. A., Tor	Sci	1904	900

Woodstock	Levan, Isaac Master Kerr, Charles Staple Cole, James McLarty Overholt, Arthur Milton Elmslie, Wallace Edward, Wesley Grafton. (Interim) Miller, Eva Matilda. (Interim)	B. A., Tor. B. A., Tor. M. A., McMaster B. A., Tor B. A., Queen's	Class., Eng., Hist., Fr., Ger. Eng., Hist. (Interim) Class. Sci. Math. Mods. and Hist. Commercial Mods. and Hist.	1898 1899 1898 1904 1904 1904 1904 1903	1,500 1,100 1,100 1,100 900 900 900 650
High Schools.					
Alexandria	MacKay, Donald Lawlor, Richard G. (Interim) Flath, Emma S.	M. A., Tor. B. A., Queen's B. A., Queen's	Class. Eng., Hist., Fr., Ger. (Interim)	1895 1904 1903	1,250 700 650
Almonte	Treleven, John Wesley McPhail, Alexander C. Thompson, Margaret Jane	B. A., Tor. B. A., Queen's B. A., Queen's	Class. Fr., Ger. (Interim) Eng., Hist.	1902 1899 1895	1,100 750 750
Arnprior	Mabee, George Elliott Hobbs, Thomas Ward, Clara Anne	B. A., Tor. B. A., Tor. B. A., Tor.	Fr., Ger. Math. Mods. and Hist.	1905 1904 1904	1,000 700 700
Arthur	Snider, Egerton E. Trench, Wycliffe A. (Interim) Blyth, Janet M. (Interim)	B. A., Vic. B. A., Tor. B. A., Tor.	Math. Math. Math.	1896 1905 1904	1,150 800 500
Athens	Masey, Norman Levi Bishop, Charles Peter Dowsley, William Clinton Graham, Robert Radie. (Interim)	B. A., Vic. B. A., Queen's M. A., Queen's B. A., Queen's	Math. Commercial. (Interim) Class., Hist., Eng.	1898 1895 1899 1904	1,100 900 900 600
Aurora	Mulloy, Charles Wesley Rice, John McBride, Sara Mabel	B. A., Tor. B. A., Tor. B. A., Tor.	Class. Class. Class.	1896 1895 1902	1,000 650 525
Beamsville	Myer, Albert Nicholas Ball, Kathleen Hester	M. A., Trin. M. A., Trin.	Math. Fr., Ger.	1898 1893	900 550
Belleville	Milburn, Edward Fairfax Knight, William W. Clarke, Henry Jellyman McRae, Jessie Carre Luton, James T.	B. A., Trin. B. A., Queen's B. A., Queen's M. A., Tor.	Math. Sci. Sci. Class	1893 1892 1892 1899 1898	1,200 900 900 600 900

V. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—Continued.

High Schools.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	Salary \$
Bowmanville.....	Gilfillan, James..... Frost, Francis Henry..... Thompson, John Fletcher..... Allin, Elizabeth A.....	B. A., Queen's..... B. A., Tor..... M. A., Tor..... M. A., Tor.....	Sci..... Math..... Class..... Fr., Ger.....	1880 1896 1904 1902	1,200 1,000 1,000 800
Bradford.....	Foucar, Walter K..... DeImage, Emelyn Euphemia..... Skitch, Ernest Frederick (Interim)	M. A., Tor..... B. A., McMaster.....	Eng., Hist., Fr., Ger..... Math.....	1901 1903 1904	900 600 500
Brampton.....	Fenton, William J..... Galbraith, William John..... Shields, Alexander M..... Garvin, Joseph L..... (Interim) White, J. Herbert..... (Permit)	B. A., Tor..... B. A., Trin..... B. A., Tor..... B. A., Tor..... B. A., Tor.....	Class..... Fr., Ger..... Eng., Hist..... Math.....	1894 1887 1902 1904 1904	1,300 900 900 900 900
Brighton.....	Newman, George Edmund..... Burke, Alexander.....	B. A., Queen's.....	Fr., Ger., (Interim) Eng., Hist.....	1898 1895	1,000 750
Caledonia.....	Seaton, Edward T..... Tapscott, Cora J..... (Interim) Gundry, Helen Myrtle..... (Interim)	B. A., Queen's..... B. A., Tor..... B. A., Tor.....	Math..... Class.....	1901 1904 1904	1,000 600 600
Campbellford.....	Hume, John Patterson..... Boyes, Robert..... Henstridge, Elizabeth..... McGuirl, Thomas H..... (Interim)	B. A., Queen's..... M. A., Queen's..... B. A., Queen's.....	Sci..... (Interim) Math..... Eng., Hist., Fr., Ger..... Commercial.....	1896 1895 1904 1904	1,000 800 800 750
Carleton Place.....	Rand, Wilfrid Erle..... Asseltine, Robert Whiting..... McDonald, Neil..... McDonald, John Ford.....	B. A., Tor..... B. A., Queen's..... M. A., Queen's.....	Math..... Class.....	1902 1901 1890 1901	1,100 750 750 800
Cayuga.....	Skeele, James Elton..... French, Bruce E..... Lick, Addie.....	B. A., Tor..... B. A., Tor..... B. A., Tor.....	..... Math.....	1897 1899 1903	1,000 700 600

Chesley.....	Bonis, Henry..... Longman, Edwin..... McManus, Emily.....	B. A., Tor..... M. A., Queen's.....	Class Math..... Eng., Hist.....	1904 1904 1901	900 750 600
Colborne.....	Bellamy, Wesley..... Keefe, Reuben Daniel.....	B. A., Vic..... B. A., Tor.....	..... .....	1890 1903	1,000 875
Cornwall.....	MacLean, Allan Edmund..... Nugent, James..... Crewson, Joseph W..... Fetterly, Hiram B..... Birchard, Alexander Fraser.....	B. A., Queen's..... B. A., Vic..... B. A., Queen's.....	Fr., Ger..... Class.....	1898 1894 1902 1904 1898	1,250 1,000 950 900 800
Deseronto.....	Smellie, William K. T..... Whyte, Robert..... Sexsmith, William Newton (Interim).....	B. A., Tor..... B. A., Tor..... B. A., Tor.....	Sci.....	1896 1896 1904	1,150 850 650
Dundas.....	Meiklejohn, Allan J..... Saunders, William Robert..... Wilson, Mary Agnes... (Interim).....	B. A., Queen's..... B. A., Queen's..... B. A., Tor.....	Eng. Hist..... Moda. and Hist.....	1901 1903 1904	1,200 800 550
Dunnville.....	Witton, James Gayford..... Graham, Peter Edwin..... Smeaton, William..... Cook, Gertrude Agnes... (Interim).....	B. A., Tor..... B. A., Queen's..... B. A., Tor..... B. A., Queen's.....	Math..... Eng., Hist. (Interim) Fr., Ger..... Sci..... Class.....	1903 1903 1903 1904	1,050 850 900 700
Dutton.....	Taylor, John Andrew..... Williams, Walter Herbert (Interim)..... Fairchild, Austin H... (Interim)..... Tait, Mabel E... (Permit).....	B. A., Queen's..... M. A., Queen's..... B. A., McMaster..... B. A., Tor.....	Sci..... Moda. and Hist..... Math.....	1898 1904 1904 1904	1,100 650 650 450
East Toronto.....	French, Fred. William..... Graham, Louis Hartley.....	B. A., Tor..... M. A., Tor.....	Class..... Sci.....	1903 1903	1,100 800
Elora.....	MacMurchy, Norman..... Corrigan, Eugene..... (Interim)..... McQueen, Rose J... (Interim).....	B. A., Tor.....	Sci.....	1895 1904 1904	1,100 600 500
Essex.....	Anglin, Robert W..... Teskey, Edith A..... Might, Lincoln..... Houston, Jessie... (Interim).....	M. A., Queen's..... M. A., Tor..... M. A., Queen's..... B. A., Tor.....	Math Class..... Sci..... Moda. and Hist.....	1902 1901 1904 1904	1,150 850 850 600
Fergus.....	Freeman, John Alexander..... Campbell, Archibald Louis.....	B. A., Tor.....	Class.....	1903 1894	1,000 800

VI. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—Continued.

High Schools.	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
Fergus—Con.	Odlum, Eleanor Dora (Interim) . . . Delmage, Edith Rachel (Interim) . .	B.A., Trin. B.A., McMaster	Mods. and Hist. Math.	1903 1904	\$ 475 500
Forest.	Stoddart, Robert Stewart, Etta Murray Sprung, Whitfield Lyman (Inter.) .	B.A., Tor. B.A., Tor. B.A., Tor.	Class. Eng., Hist., Fr., Ger. Math.	1904 1904 1904	900 700 750
Fort William.	Pilkey, Peter Joseph Wood, Elmore Everton	B.A., Queen's B.A., McMaster	Math.	1901 1902	1,200 1,000
Gananoque.	Graham, Robert George Irwin, Herbert William Robertson, J. Nelson (Interim) Mitchell, Jessie A.	B.A., Vic. B.A., Tor. B.A., Tor. B.A., Tor.	Math. Mods. and Hist. Class.	1894 1902 1905 1904	1,250 900 850 600
Georgetown.	Coutts, Richard David Halnan, Lemen R. (Interim) Hagan, James W. (Interim) Watterworth, Grace McC.	B.A., Tor. M.A., Trin. B.A., Tor.	Class. Math. Commercial	1897 1904 1904 1900	1,100 800 700 600
Glencoe.	Morrow, John Duncanson Harrington, James T. Eby, Florence Mary (Interim)	B.A., Tor. B.A., Tor.	Class	1898 1904 1904	850 775 450
Gravenhurst.	Keith, George Walter Dougherty, Annie C. (Interim)	B.A., Tor.	Math.	1904 1905	1,000 600
Grimsby.	Harrison, Charles W. Strang, Rose Innis	M.A., Vic.		1894 1901	800 550
Hagersville.	Elliott, Thomas Edward Wright, Robert Brunt, Robert A. (Interim)	B.A., Tor. B.A., Tor.	Eng., Hist., Fr., Ger. Sci.	1905 1896 1905	900 715 675
Harriston.	MacLean, Godwin V. Corkill, Edward J.	M.A., Tor., and Harvard B.A., Queen's	Math Sci.	1901 1902	1,100 800

Hawkesbury	Alexander, Helen Bow . . . (Interim)	B.A., Tor.	Modrs. and Hist.	1904	500
	Jackson, Nellie M. (Interim)			1904	400
Iroquois	Clothier, James O	B.A., Queen's	Fr., Ger., (Interim)	1902	1,000
	Higginson, Maria Adelaide			1897	600
	Youngson, Mary A. (Interim)	B.A., Queen's		1904	600
	Stanley, Thomas E. A.	B.A., Tor.	Math.	1897	1,050
	Anderson, William George	B.A., Tor.	Class.	1901	900
	Rose, Marion H.		Fr., Ger	1898	625
	McGuire, James F. (Interim)	B. A., Queen's	Sci	1905	900
Kemptville	Dillane, William	B.A., Tor.	Math.	1895	1,100
	Nelson, John	B.A., Queen's		1896	900
	Morris, Arthur W. (Permit)	B.A., Tor.		1903	750
	McMillan, George. (Interim)			1904	800
	Bibby, Maria Victoria. (Interim)	B.A., Tor.	Modrs. and Hist.	1904	500
Kincardine	Perry, Samuel Walter	B.A., Vic.	Class	1890	1,250
	Courtice, Samuel James.	B.A., Tor.	Math.	1903	850
	Grainger, Horace Alex (Interim)	B.A., Tor.	Sci	1902	900
	Lamont, Nellie Jane. (Interim)	B.A., Tor.	Eng., Hist.	1904	700
Leamington	Elliott, John.	B.A., Queen's	Eng., Hist., Math	1896	1,100
	Robertson, Alexander Morton	M.A., Queen's	Math., Fr., Ger.	1900	800
	Barron, Robert A.	B.A., Tor.	Class., Eng., Hist., Fr., Ger.	1904	800
	Sanders, Charlotte Annie (Interim)	B.A., McMaster	Sci.	1904	650
Listowel	Phillips, William Alexander.	B.A., Tor.	Eng., Hist., Fr., Ger.	1892	1,100
	Nichol, William Wallace.	B.A., Tor.	Math	1898	900
	Clarke, Joseph Campbell.	B.A., Tor.	Class.	1902	900
Lucan	Wren, John Stewart.	B.A., Tor.	Math	1903	1,000
	Close, Frank D.		Sci.	1904	650
	Cunningham, Evangelin'e G. (Interim)	B.A., Tor.		1904	500
	Mara, Ida M. (Interim)			1903	450
Madoc	Watson, Alexander H	B.A., Tor.		1889	1,100
	Connor, Charles F. (Permit)			1905	700
	Coad, Edith L. (Interim)	B.A., Queen's		1904	450
Markham	Reed, George Henry	M.A., B. Paed., Tor.	Class.	1890	1,100
	Devolson, John H.	M.A., B. Paed., Tor.	Math	1903	750
	McNeill, William K. (Interim)	B.Sc., Queen's		1904	650
	Mairs, Edith M. (Interim)	M.A., Trin		1902	500

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—Continued.

High Schools.	Names of teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
					\$
Markham—Con.	Fisher, Edna B. V. (Interim)	.....	Commercial.....	1905	400
Meaford	Cornwell, John Leslie	B.A., Tor., and McMaster.	Math	1900	1,200
	Huff, Samuel	B.A., Queen's	Sci.	1891	800
	Dundas, Arthur A.	B.A., Tor. ....	.....	1897	900
	Francis, Annie Buchan	B.A., Tor.	Mods. and Hist.	1904	700
Midland	Simpson, Ernestin.	B.A., Tor.	Math. (Interim)	1904	900
	Glass, William Arthur	B.A., Tor. ....	.....	1904	800
	Smith, Lillias Pearl. (Interim)	B.A., Tor. ....	.....	1904	500
Mitchell	Elliott, William	B.A., Tor.	Math	1882	1,050
	Carter, Ealie	B.A., Tor. ....	.....	1903	800
	Stephens, Robert H. (Interim)	.....	.....	1902	700
Mount Forest	Brethour, John Henry	B.A., Vic.	Class.	1891	1,150
	Armstrong, Frank	B.A., Tor.	Math	1904	800
	Coombes, Joseph E. (Interim)	.....	Sci.	1904	800
	Fortner, Theodore G. (Interim)	B.A., Tor.	Mods. and Hist.	1904	400
Newburgh	Nesbit, David Ashton	B.A., Queen's	Eng.	1893	1,100
	Millar, Frederick Gourlay	B.A., Tor. ....	.....	1903	700
	Hedley, William Powell. (Interim)	B.A., Tor.	Math	1904	650
Newcastle	Davidson, Hugh	B.A., Tor. ....	.....	1888	900
	Grose, Caroline .....	.....	.....	1901	400
Newmarket	Coombs, Albert Ernest	M.A., B. Ped., Tor.	Class.	1899	1,075
	Hollingshead, John Edwin .....	.....	.....	1884	775
	Carefoot, George Andrew	B.A., Queen's	Sci.	1903	775
Niagara	Wright, William Jonathan	M.A., Tor.	Class.	1904	800
	Anderson, Lillie Catharine (Interim)	.....	.....	1904	450
Niagara Falls South	Fitzgerald, Eliza S.	M.A., Queen's	Class.	1904	1,200
	Colquhoun, Thomas Alvin (Interim)	.....	.....	1904	550

North Bay	McKinley, James Matthew Girdwood, Arthur Reg'd (Interim) Barr, Jean	B.A., Tor. B.A., McMaster B.A., Queen's	Class. Math	1904 1904 1903	1,100 850 600
Norwood	Davidson, John Archer, May Alice Leighton, Clara Edna (Interim)	M.A., LL.B., Vic B.A., Tor	Class.	1882 1904 1904	1,100 600 550
Oakville	Lillie, John Turner Montgomery, William Doherty, Mabel (Interim)	B.A., Vic B.A., Tor	Class Math Commercial	1905 1905 1903	1,200 800 650
Onemee	Jardine, William Wilson Harvey, William Blakely	B.A., Tor		1898 1903	800 700
Orangeville	Steele, Alexander Dunkley, Albert Wesley Somerville, Thomas C Boyd, Annie Alicia (Interim) Hutchinson, May R	B.A., Tor M.A., Queen's B.A., Tor M.A., Queen's	Eng., Hist., Math Class Moda. and Hist. Sci., Commercial	1879 1901 1904 1904 1904	1,400 800 800 600 500
Oshawa	Smith, Lyman C Stemon, Edward T Panton, Jessie R Stevenson, Louis Baird, Mabel Margaret (Interim)	B.A., Vic B.A., Vic B.A., B.Sc., Vic B.A., Tor	Class., Eng Math Math., Sci Moda. and Hist	1882 1892 1886 1902 1904	1,300 1,000 700 1,000 650
Paris	Bell, Walter N Hedley, Robert Wesley Dickey, Mabel Ada Sanders, Charlotte Annie (Interim)	B.A., Tor B.A., Tor B.A., Tor B.A., McMaster	Class Math Moda. and Hist Sci	1898 1903 1905 1905	1,300 800 600 750
Parkhill	McDougall, Neil Taylor, Emma Jean Guest, Emily Jane Hood, Finlay (Interim)	B.A., Tor B.A., Tor M.A., Tor	Sci Eng., Hist. (Interim) Commercial	1897 1903 1901 1904	1,000 575 650 800
Pembroke	Ross, Ralph White, Edwin Theodore Shirreff, Robert Marshall Williams, Lorne Joseph	B.A., Tor B.A., B.Paed., Tor	Class Math Fr., Ger	1895 1900 1895 1905	1,250 950 850 800
Petrolia	Bell, John Johnstone Clyde, William Donaldson, William	B.A., Tor M.A., Queen's B.A., Tor		1888 1888 1902	1,200 1,050 800

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—*Continued.*

High Schools.	Names of teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
					\$
Petrolea.— <i>Con.</i>	Hill's, Minnie.....	B.A., Tor.....	Math.....	1903	800
Pictou.....	Dobson, Robert.....	B.A., Vic.....	Math.....	1880	1,200
	Reynar, Marianne Beatrice.....	B.A., Vic.....	Mod's. and Hist.....	1901	800
	Dolan, John Henry.....	B.A., Queen's.....	Class.....	1899	1,100
	Kemp, William.....	M.A., Queen's.....	Mod's. and Hist.....	1903	850
	Hamilton, William John.....	.....	Sci (Interim).....	1903	1,000
*Plantagenet.....					
Port Arthur.....	Howell, William B. L.....	B.A., Tor.....	Class.....	1904	1,100
	McNab, George Gibbon. (Interim)	M.A., Queen's.....	Math.....	1904	900
	Aitchison, Belle.....	.....	.....	1903	625
Port Dover.....	Liddy, William R.....	B.A., Tor.....	Sci.....	1897	800
	Martin, John Strickler.....	B.A., Tor.....	.....	1899	600
Port Elgin.....	Clark, Joseph Campbell.....	B.A., Tor.....	Class.....	1905	1,000
	Innis, Alexander R.....	.....	.....	1892	800
	Ferguson, Elma Slater... (Interim)	.....	.....	1904	500
Port Hope.....	Kirkconnell, Thomas A.....	B.A., Queen's.....	Math.....	1888	1,300
	Caesar, Lawson.....	B.A., Tor.....	Class.....	1900	950
	Galbraith, Thomas M... (Interim)	.....	.....	1904	900
	Mills, Martha Christine.....	B.A., Queen's.....	Fr., Ger.....	1904	800
	Moir, Catharine Elizabeth.....	.....	.....	1896	650
Port Perry.....	McBride, Dugald.....	B.A., Vic.....	Class, Math.....	1871	1,300
	Stone, George.....	.....	.....	1883	850
	Downey, Rosa Fred..... (Interim)	.....	.....	1904	800
	Smith, Annie Maria..... (Interim)	B.A., Vic.....	.....	1904	500
Port Rowan.....	Pugsley, Edmund.....	B.A., Vic.....	Sci.....	1896	900
	Shawcross, Mary Louise. (Interim)	.....	.....	1903	450
Prescott.....	Rose, Robert Charles.....	B.A., Tor.....	Math.....	1896	1,080
	McPherson, Hattie Georgina.....	B.A., Queen's.....	Mod's. and Hist.....	1900	600
	Cameron, Archibald Rose (Interim)	B.A., Queen's.....	Class.....	1904	700

Rat Portage (Keenora)	Roberts, Thomas Henry..... Wilson, W. Ashbury..... Nelson, Etta.....	B. A., Tor..... B. A., Queen's..... .....	..... ..... .....	1902 1903 1905	1,250 1,050 600
Richmond Hill	Shaw, Robert..... Andrews, Robert T. (Interim) Bell, M. F. Winnifred. (Interim)	B. A., Tor. and McMaster B. A., Tor.....	Math. Class.....	1902 1904 1903	850 600 425
*Rockland	.....	.....	.....	.....	.....
Sault Ste. Marie	Race, Wilfred Ballentine. (Interim) Rudlen, George William..... Donaldson, William.....	B. A., Queen's..... B. A., Tor..... B. A., Tor.....	Mods. and Hist. Math..... Sci. (Interim).....	1904 1904 1905	1,200 1,000 1,000
Simcoe	Christie, James Douglas..... Galbraith, Robert..... Morgan, John James..... Lingwood, Frederick H.....	B. A., Tor..... B. A., Queen's..... B. A., Vic..... M. A., Trin., B. A., Lon., Eng.....	Eng. Hist., Fr., Ger..... Math..... Sci..... Class.....	1889 1899 1903 1904	1,300 900 900 900
Smith's Falls	Houston, John Arthur..... Stubbs, Samuel John..... Smith, Thomas Corlett..... Lunny, Rosemary..... (Interim)	M. A., Trin..... B. A., Tor. and Queen's..... B. A., McGill.....	Math..... Eng., Hist., Class.....	1887 1897 1903 1904	1,300 950 900 500
Smithville	Tremeer, James..... Hill, Mary Alpina.....	B. A. Vic.....	Class.....	1898 1902	950 500
Stirling	Kennedy, George E..... McKeracher, Alda..... (Interim) Tapscott, Mabel C..... (Interim)	B. A., Vic.....	Sci.....	1893 1905 1904	925 500 450
Streetville	Cameron, Aldis W..... Augustine, Wilfred H..... (Interim)	B. A., Tor..... B. A., McMaster.....	Eng., Hist. Math.....	1898 1904	900 650
Sydenham	Henry, Thomas McKee..... Brown, Percy William..... Ewing, Florence May..... (Interim)	B. A., Tor..... B. A., Queen's.....	Math..... Sci.....	1903 1903 1904	1,100 850 450
Thorold	Bald, William Francis..... Smith, Margaret T. Hubner.....	B. A., Tor., LLB., Queen's.....	Class.....	1898 1898	1,200 700
Tillsonburg	Minns, James Edward.....	B. A., Vic.....	Sci., Math.....	1904	1,100

* School established 1904, but no report received.

IV. List of Principals and Assistants of Collegiate Institutes and High Schools, January, 1905.—Continued.

High Schools	Names of Teachers.	Degrees.	Specialists.	Date of appointment.	Salary.
					\$
Tillsonburg—Con.	Urquhart, John	B. A., Man.		1905	750
	Hindson, Hilda Mary	(Interim)		1904	450
Toronto Technical.....	Pakenham, William	B. A., D. Ped., Tor.	Eng., Hist., Fr., Ger.	*1901	2,400
	Eldon, Robert H.	B. A., Queen's	Math., Com.	1904	1,800
	Baird, William	(Interim)	Com.	1903	1,000
	Dandy, William P.	B. A., Tor.	Com.	1902	1,000
	Young, William D.	B. A., Tor.		1899	1,500
	Wilson, William J.	(Interim)		1902	1,000
	McBean, John W.	B. A., Tor.		1902	1,200
	Kirkland, William S.	M. A., Queen's	Sci.	1903	1,000
	Warren, James M.	B. A., Tor.	Math.	1903	1,200
	Rutherford, William H.	B. A., Tor.		1904	1,000
	Rundie, John A.			1904	1,000
	Macallum, Andrew F.	B. A. Sc., Tor.		1894	1,500
	Macpherson, William E.	B. A., Tor.		1904	1,000
	Guillet, Cephas	B. A., Vic., Ph. D., Clark	Eng., Hist., Fr., Ger.	1904	1,000
	Tennant, Isabella L.	B. A., Tor.	Mods. and Hist. ... (Interim)	1904	1,000
	Downey, Helen E.	B. A., Tor.	Mods. and Hist.	1904	1,000
	Davidson, Margaret			1902	1,000
	Marehall, Isabell			1903	600
	Macmillan, Margaret		(Special Technical Instructor)	1903	500
	† Hahn, Gustav		do	1902	
	† Maynard, Carmen M.		do	1903	
	† Peake, Charles N.		do	1902	
	† Barrett, A. Clarence		do	1899	
	† Ronan, Gladys		do	1902	
	† Usborne, Gordon		do	1904	
Trenton.....	Ingall, Elmer Ellsworth	B. A., Tor. and Queen's.		1895	1,100
	Andrews, David	M. A., Queen's	Maths.	1904	800
	Rae, Edith Gertrude	(Interim)	Class.	1904	600
	Warner, Alvin McPhee. (Interim)	B. A., Tor.		1904	450

† Whole time not devoted to the School.

* Dates of appointment to the school, which became a High School in 1904.

Uxbridge	Park, Henry George Lang, Hector Wegg, Charlotte Sophia Wilson, Ethel M	(Interim) (Interim) (Interim)	B. A., D. Pad., Tor B. A., Tor B. A., Tor	Class Math	1888 1903 1904 1904	1,000 750 500 450
Vienna	†Bonis, Harry Jenkins, Myrtle Mellaney	(Interim)	B. A., Tor	Class	1905 1905	800 500
Walkerton	Morgan, Joseph Norris, James Day, Alfred Ernest Cheswright, Richard C.	 	M.A., Tor M.A., Queen's M.A., Queen's	Class Math Eng., Hist., Fr., Ger Sci	1881 1903 1901 1900	1,200 1,000 800 800
Wardville	Weidenhammer, William B. Goulding, Hannah Mitchell	(Int'm)	B.A., Tor	Eng., Hist., Fr., Ger	1905 1902	800 400
Waterdown	Perry, Peter Bellry, Effie Stafford, John	(Interim) (Permit)	M.A., Trin B.A., Tor	Class	1902 1904 1905	900 400 500
Waterford	Mills, John Hudson McKechnie, John Henry Fleming, Maud E. F.	 (Interim) (Interim)	M.A., Queen's M.A., Queen's B.A., Queen's	Class Math Modis. and Hist.	1899 1903 1904	1,200 800 600
Watford	Potter, Charles McQueen, James M Bambridge, Celia Robinson, Fred	 (Permit)	B.A., Tor B.A., Tor	Math Modis. and Hist.	1892 1903 1900 1905	1,050 750 500 600
Welland	McQuaig, Herbert M. McNiet, James Foster, Jessie Buchner, Claribel M.	 	B.A., Queen's B.A., Tor	Sci Fr., Ger	1891 1896 1899 1901	1,100 900 550 550
Weston	Kennedy, Thomas Hubbard, Joseph J Hawkins, Maud Mary	 (Interim)	M.A., Queen's B.A., Tor	Math Eng., Hist	1902 1904 1904	900 525 550
Wiaton	Baines, Archibald W Jermyn, Percy Thomas Ferguson, Thomas R.	 (Permit)	M.A., Trin B.A., Tor M.A., Queen's	Eng., Hist.	1895 1900 1905	1,000 800 700
Williamstown	MacDonald, James Witheril, Ebenezer Rufus Shepherd, Martin Ward	 	M.A., Queen's B.A., Queen's B.A., Tor	Eng., Hist., (Interim) Class	1898 1895 1903	1,100 800 750

† Appointed since 7th Jan., 1905.

Annual
Archæological Report
1904

BEING PART OF
Appendix to the
Report of The Minister of Education
Ontario

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



TORONTO
Printed and Published by L. K. CAMERON,
Printer to the King's Most Excellent Majesty
1905



WARWICK BRO'S & RUTTER, LIMITED, PRINTERS,
T O R O N T O .

CONTENTS.

	Page.
Presentation	5
Additions to the Museum	4
Notes on some Specimens	17
Hammer or Pestle	17
Rubbing Stones	17
Woman's Knife (unfinished)	19
Stone File	19
Tooth Tools	20
Stone Axes	22
Chisels, or Club Spikes	24
Stone Gouges	24
Stone Pipes	27
Clay Pipes	31
Bone Articles	32
Bone Arrow	35
Bone Combs	35
Are the Perforated Bone Needles Prehistoric? W. J. Wintenberg	39
Pendants of Stone	42
Turtle (Tortoise) Shell Pendant	44
Shell Objects	45
Wampum Strings	46
Bird Amulet	49
Copper	50
Pottery	50
Picture Writing	54
Porcupine Quill Work	57
Husk False Faces	58
Winona Stone	59
Mexican Marble Mask	61
Oneida Mounds	62
House of the Devil	62
Old Dam on the Grand River	64
Anthropology at the World's Fair, St. Louis	69
An Example of Primitive Persistence	71
The Ojibwas of Lakes Huron and Simcoe. J. Hugh Hammond	71
Cahiague	74
The Coming of the Ojibwas	76
North and South Orillia	77
Lake St. George	87
Cahokia, or Monk's Mound	88
Rupert's Band in the Olden Time. By James Stewart	89
Mortuary Customs in British Columbia. Rev. R. W. Large, M.D., C.M.	100
A Museum or a Musée?	101
Indian Graves in New York State	103
The Eskimo of a Hundred and Fifty Years Ago. John Potts. By courtesy of Miss Muriel Merrill	104
The Marquis de Nadaillac. Biographical Notes, etc.	113
Correction	117

At no period of man's life were wars the normal state of existence. Prince Krapotkin (contemporary Russian scientist).

Certain impulses develop in childhood which disappear entirely in later life. H. R. Marshall (American psychologist).

Crime is a phenomenon of atavism, C. Lombrosa, (Italian criminologist).

Crime is psychic atavism. P. Mantegazza (Italian anthropologist and physiologist).

During the primitive period rites are the immediate and direct expression of the religious sentiment, and translate the genius of each people. T. Ribot.

Even among savages some leisure from the cares of life is essential for the culture of art. A. C. Haddon (English anthropologist).

Excess of imagination in the child, as with primitive peoples, is clearly connected with less clearness of perceptions, which are transformed, at will, one into another. T. Ribot.

Every man is some months older than he bethinks him. Sir T. Browne.

For the animal, for the child, for the savage and the uncivilized man, form and physical strength are all; for the civilized man mental strength and moral strength tend to become the object of greatest value. Colajanni (Italian sociologist).

In primitive poetry man is in the foreground, nature is only an accessory. T. Ribot.

In primitive society the drama is the school of religion. J. W. Powell.

In the natural world everything has a meaning. L. F. Ward.

Like primitive peoples and savages, children lose an immense amount of time in contests and debates. B. Machado.

Man living, flesh and bone, is the last object the savage came to deify. G. Tarde. Dr. A. F. Chamberlain in *Journal of Folk Lore*, Boston, July-Sept., 1904, pp. 161-170.

ARCHÆOLOGICAL REPORT, 1904.

HON. R. A. PYNE, M.D., LL.D.
Minister of Education.

SIR,—The accompanying report is not as comprehensive as it was intended to be, owing not only to the large and increasing amount of time demanded for museum and office work, but because of the numerous interruptions that have inevitably occurred since its preparation was begun.

Next year, under similar conditions, it will be almost impossible to issue anything but a very brief report, because of the large number of re-arrangements that have become imperative if the collection is to maintain its position, and changes of this kind require a great deal of time. Every year, for the last five or six years, re-arrangement has been postponed with the hope that additional case-room would be supplied; failing this, however, it will now be necessary to stow away a considerable quantity of the material at present on exhibition, to make room for the improved re-installation which will demand an increase in the number of labels, as well as an amplification of their contents.

Correspondence and other office duties during 1904 exceeded greatly those of any previous year, and, consequently, not much time could be given to field-work. A few visits were made to some interesting portions of the Province, and fuller reference to these will be found in what follows.

During the year we were presented by Mrs. J. W. Scatcherd, a Canadian lady now residing in Flagstaff, Arizona, with a number of excellent specimens from the Pueblo country.

I have arranged with the curators of several other British colonial museums with a view to making ethnological as well as archæological exchanges, and these will be effected just as soon as it is possible to find time for selection, listing, and packing.

You will, I am sure, be pleased to know that the interest in what is prehistoric, relating to our own country, manifestly grows. Not only is this evidenced by the number of visitors to the museum, but by the demand for copies of the archæological reports both in Canada and other countries.

I may be permitted to repeat that as no provision has yet been made for workshop accommodation, the quantity of material now in the museum, and in need of repair, is rapidly accumulating.

The time and attention demanded by the largely increased number of specimens are such as to require additional assistance. There is now enough work to employ a general assistant, and to keep an expert maker of labels busy continuously.

Without these, the museum may be maintained in the old way, but as a factor in our educational system, it must prove to be of little or no value.

I have the honor to be,

Yours respectfully,

DAVID BOYLE.

ADDITIONS TO THE MUSEUM.

26,754.—Large stone, bear pipe, six and three-quarter inches in height, slightly imperfect, very well carved, although not highly finished, work evidently not quite completed. This is the largest effigy pipe yet found in Ontario. It was picked up by Mr. T. W. Newberry, lot 6, con. 20, Tiny township, Simcoe county, in 1902, and was procured for the Provincial Museum by Lieut. G. E. Laidlaw.

26,755.—Unfinished knife blade. The tang is forged and the outline of the knife has been formed in a somewhat unmechanical way by means of a sharp cold chisel, and all the cutting has been done on one side. Length six and five-eighths inches, including the tang, which is two inches, breadth of blade an inch and a quarter, thickness of blade 2 mm. Found on banks of Grass River, Victoria Road, Victoria County, presented by Dr. J. Grant, per Lieut. G. E. Laidlaw.

26,756.—Copper arrowhead with socket; three inches long, socket one inch and a quarter long; blade flat on both sides. Found by Lieut. G. E. Laidlaw, on village site number 20, block E, Bexley township.

26,757.—Pocket-knife blade, steel, ruins of Fort Ste. Marie, North Simcoe, stamped MATHIEV. SAMVEL. I. A. PIERRE. FLATIN. David Boyle, Toronto.

26,758.—Long clay pipe stem, Bexley township, George E. Laidlaw.

26,759.—Bone needle, worn very smooth by usage, four inches long, Eglinton, York township, David Boyle, Toronto.

26,760.—Bone head, four and one-eighth inches long. Eglinton, York township, David Boyle, Toronto.

26,761.—Bone, tally-bead, three and three-quarter inches long, Eglinton, York township, David Boyle, Toronto.

26,762-3.—Scraper (chert) Eglinton, York township, David Boyle.

26,764.—Bar amulet, (cast) Carmel township, Eaton county, Mich., C. V. Fuller Grand Ledge, Mich., U.S.A.

26,765.—Turtle-like figure, two and seven-eighths inches long and one and a half inches wide of dark (almost black) stone, and comparatively thin (thickest part not more than three-eighths of an inch. From end to end along the middle, on the upper side, and fully half way along from the head on the under side (terminating in the middle in a loop) is an inset of silver one-sixteenth of an inch wide. There is a diagonal break across the neck, but the head is kept in place by means of the metallic bar. Given to Hon. W. Robinson in 1848, by an Ojibwa, at Bruce Mines, Ont. Alfred Willson, C.E., Toronto.

26,766.—Abortive arrow-head of chert, of very pure quality, lot 4, L.R.W., Bosanquet. Alfred Willson, C.E., Toronto.

26,767.—Large, grooved stone axe, imperfect, lot 5, con. 1, R. W. Ellis, (Mount Pleasant village) Brantford township, Brant county, per John Jefferson, Paris, Ont.

26,768-89.—Twenty-one flaked chert implements of various shapes, J. E. Moody, Appleby, lot 1, concession 3, Nelson township, Halton county.

26,790.—Large shell (*Busycon perversum*) from grave in Tecumseth township, Simcoe county. David Boyle.

26,791.—Large shell (*Busycon perversum*) partly worked; from ossuary at Lake Medad, Flamboro township, Wentworth county. David Boyle.

26,792.—Roughly made and undecorated, shallow, red bowl. New Mexico.

26,793.—Small and roughly made bowl or cup, with a necked and flat base, plain, Santa Clara. Arizona.

26,794.—Small red cup, with necked and flat base. Decorated very rudely, with straight black lines arranged angularly. Arizona.

26,795.—Small red cup with necked and flat base. Decorated with roughly drawn lines in black, arranged in curves. Arizona.

26,796.—Small red cup, with necked and flat base. Decorated with black lines, and trefoils in black. Arizona.

26,797.—Small red cup, round bottom. Roughly decorated with black lines. Arizona.

26,798.—Small red cup, round bottom, very roughly decorated with black lines. Arizona.

26,799.—Small red cup, with flared lip and round bottom. Roughly decorated with black lines. Arizona.

26,800.—Small, red olla, round bottom, decoration in black lines, arranged triangularly. Arizona.

26,801.—Small red olla, flattened bottom. Lozenge decorations in black lines. Arizona.

26,802.—Small red olla, flattened bottom. Decorative lines, black, in perpendicular zigzags.

26,803.—Small red cup (somewhat egg-cup like) with slightly incurved lip. Decorated with spirally arranged black lines. Arizona.

26,804.—Small red olla, round bottom. Heavy, black triangular decorations. Arizona.

26,805.—Small red pitcher with handle and lip—round bottom.—Decorations in black lines. Arizona.

26,806.—V-shaped red tube with black lines. Arizona.

26,807.—Small red cup (wine-glass like) arrow-like decorations in black inside and outside. Arizona.

26,808.—Rudely made (micaceous clay) vessel with bale-handle surmounted by bird like form. Arizona.

26,809.—Small, long necked, olla, in light coloured clay. Flat bottom. Yuma Indian, Arizona.

26,810-1.—Large red ollas, decorated roughly with black lines. These are sixteen inches in height, and twelve inches in diameter at the widest part. Arizona.

26,812.—Large red pitcher twelve inches high, handle and lip. Heavy, triangular decorations in black. Arizona.

26,813.—Small white vessel with bale handle. Decorated with black lines, very rudely made. Pueblo.

26,814.—Small, white, saucer-like vessel. Unclosed encircling lines inside. Central design, floral, seven-armed. Pueblo.

26,815.—Clay bottle. Arizona.

26,816.—Clay bottle. Arizona.

26,817.—Clay plate. Arizona.

- 26,818.—Clay bottle. Arizona.
- 26,819.—Large black spoon or ladle-like clay object. Santa Clara, Arizona.
- 26,820.—Small black pitcher. Santa Clara, Arizona.
- 26,821.—Clay cup, six-sided at the base and round a lip. Arizona.
- 26,822.—Clay cup, six-sided at base and round at lip. Arizona.
- 26,823.—Small white plate (broken). Arizona.
- 26,824.—Small white spoon-like object in clay. Pueblo. Arizona.
- 26,825-31.—Flint and chert arrowheads, Southern Indiana, David Boyle.
- 26,832-3.—Drills, Lawrenceburg, Southern Indiana, U. S. A. David Boyle.
- 26,834-39.—Small axes or chisels, Guelph and Eramosa township. David Boyle.
- 26,840.—Pipe head of fine limestone, Hastings, River Trent, Asphodel township. David Boyle, Toronto.
- 26,841.—Stone pipe, carved human form, on bowl, head of figure broken off, Nassagaweya township, Halton county, Ontario. David Boyle.
- 26,842.—A portion of what seems to have been intended for the stem of a stone pipe, two of the quadrangular sides are roughly pecked, the other two have been rubbed fairly smooth, on three sides are shallow depressions clearly made with the point of a stone drill, Elora, Ont. David Boyle, Toronto.
- 26,843.—Small pendant or amulet of Hudson River sandstone; a rudely carved human face on one side, the other being marked irregularly with incised lines near Fergus, Nichol township, Wellington county, Ont. David Boyle, Toronto.
- 26,844.—Paleolith, Bois de Rocher, St. Helens, Cotes du Nord France., David Boyle, Toronto.
- 26,845-6.—Paleoliths, Thames Valley, Oxfordshire, England. David Boyle, Toronto.
- 26,847-61.—Flint flakes, Northstoke, England, collected by T. H. Powell, England. David Boyle, Toronto.
- 26,862.—Large black chert spearhead, Leeds township, Leeds county, (near Gananoque). David Boyle, Toronto.
- 26,863-7.—Flint flaked arrowheads, Bignor Hill, Sussex, T. H. Powell, London, England. David Boyle, Toronto.
- 26,868.—Stone gouge (quadrangular in cross section) found by Mr. T. Jordan, near Seaforth, Ont. Presented by A. Cosens, B.A.
- 26,869.—Small and unsymmetrically formed vessel, (Moqui) ornamented in brown, red and white. Mrs. J. Webster Wallace, Flagstaff, Arizona.
- 26,870.—Small water filter, sharply constricted in the middle. The upper half is ornamented with two lizards in black. Mrs. J. W. Wallace, Flagstaff, Arizona, U.S.A.
- (This specimen was found in the Walnut Canon, nine miles southeast of Flagstaff in the country of the Cliff Dwellers).
- 26,871.—Olla, with simple, but peculiar double hook-like markings, arranged in pairs, horizontally and perpendicularly, alternately. Mrs. J. W. Scatcherd, Flagstaff, Arizona.

26,872.—Small olla, (Moqui) simple flower design. Mrs. J. W. Scatterd, Flagstaff, Arizona.

26,873.—Moderate sized and peculiarly ornamented olla; the pattern which is in four parts contains in each division a very highly conventionalized bird form, facing an erect plant. Mrs. J. W. Scatterd, Flagstaff, Arizona. See figure 79.

26,874.—Moderate sized olla (Moqui) with somewhat unusual pattern in dark browns. Mrs. J. W. Scatterd, Flagstaff, Arizona.

26,875.—Small olla with sharply constricted neck, and somewhat rudely ornamented, (Moqui). Mrs. J. W. Scatterd, Flagstaff, Arizona.

26,876.—Rattle used in the Moqui Snake Dance, Arizona. Mrs. J. W. Scatterd, Flagstaff, Arizona.

26,877.—Miniature Navajo loom, small, with portion of woven cloth, the material said to be native wool (Rocky Mountain sheep) and the colors of native dyes, red, yellow, orange and black. Mrs. J. W. Scatterd, Flagstaff, Arizona.

26,878.—Small piece of discoidal sand stone with roughly formed handle on one side, perhaps used as a pestle or upper stone with a metate. Mrs. J. W. Scatterd, Flagstaff, Arizona.

26,879.—Hand stone for using with metate; this specimen is thin and ovate, and made from a hard volcanic tufa. Mrs. J. W. Scatterd.

26,880.—Large and very good specimen of metate of hard tuffaceous material. It is twenty inches in length, eleven in breadth, and the cavity is worn three and a half inches deep. Arizona, Mrs. J. W. Scatterd, Flagstaff, Arizona, U.S.A.

26,881.—Ladle or dipper made of horn from mountain sheep, Cliff Dwellings, Walnut Canon, nine miles southeast of Flagstaff, Arizona. Mrs. J. W. Scatterd, Flagstaff, Arizona.

26,882.—Bone awl or needle, four inches long, lot 7, con. 10, Innisfil township. Howard Kelcey, Vine P.O., Ont.

26,883.—Metacarpal bone of deer (three marks on front side) probably used in gambling, lot 7, con. 10, Innisfil township. Howard Kelcey, Vine P.O., Ont.

26,884.—Bone bead, seven-eighths of an inch long, lot 7, con. 10, Innisfil township. Howard Kelcey, Vine P.O., Ont.

26,885.—Cast of very finely proportioned slate gorget, oval, found in Huron township, Wayne county, Mich., by Daniel Girard in 1902. Charles V. Fuller, Grand Ledge, Mich., U.S.A.

26,886-903.—Flints (well made) lots 10 and 11, concession 1, Brantford township. John Jefferson, Paris, Ont.

26,904.—Large arrow-head, or small spear-head of black flint, barbed and well made, lot 10, con. 1, Brantford township. John Jefferson, Paris, Ont.

26,905.—Large, very well made, and almost perfect, banner or butterfly stone, Stouffville, Markham township, York county. C. Ainsworth.

26,906.—Long (15 inches) stone chisel, sharpened at both ends. It is roughly quadrangular in cross section, for the greater part of its length, and looks like a splinter upon which little work has been done beyond some smoothing, except at each end. Stouffville, Markham township, York county. C. Ainsworth.

26,907.—Stone tool, five inches long, roughly pointed at each end. Stouffville, Markham township, York county.

26,908.—Stone adze, very well made, almost perfect, seven inches long. Stouffville, Markham township, York county.

26,909.—Stone gouge, somewhat imperfect, hollowed from end to end. Not common in this part of the province. Stouffville, Markham township.

26,910.—Long and comparatively narrow stone axe or chisel, polished only in part. Stouffville, Markham township.

26,911.—Small stone chisel, pointed at each end, one point or cutting part being made edgewise, and the other sidewise. Stouffville, Markham township.

26,912-19.—Celts or axes in various conditions and of various sizes. Stouffville, Markham township.

26,920.—Old clay pipe of European pattern, probably French, found by Mr. John E. Riggall between floor of upper and ceiling of lower rooms, in the old Ashbridge house, Queen street east, Toronto. Mr. John E. Riggall.

26,921.—Old European clay pipe, probably French. Stem nearly eight inches long. Found near Fort Rouille (Old Toronto) David Boyle, Toronto.

26,922.—Large flint scraper, lot 18, con. 9, Blenheim township, Oxford county. Mr. L. Hunter, per W. J. Wintemberg, Washington, Ont.

26,923.—Pair of native moccasins made by late Hy-joong-kwas, Chief Medicine man of the Onondagas, worn by him when procured in 1898. David Boyle.

26,924.—Inlaid and relieve metal and bamboo, Japanese tobacco pipe. David Boyle.

26,925.—Photograph of Flathead, Cree, Blackfoot and Nez Perce collection in possession of G. W. Gill, Pincher Creek, Alberta. Mr. G. W. Gill.

26,926-7.—Two strike-a-lights found with Indian remains in Whitechurch township, York county, Ontario. David Boyle.

26,928.—Strips of paper mulberry bark, same as used in the making of tapa cloth in South Pacific Islands. David Boyle, Toronto.

26,929-32.—Scrapers, Thames Valley, England. David Boyle, Toronto.

26,933.—Plain and well finished small stone axe, lot 17, con. 3, East Oxford, Ont. Wm. P. Hart, Esq., Woodstock.

26,934.—Grooved stone axe, unusually narrow at cutting edge. Lot 17, con. 3, East Oxford, Ont. Wm. P. Hart, Woodstock, Ont.

26,935.—Obsidian core, imperfect; latterly used as a tool. Brit. Guiana. Very Rev. Dean Harris, D.D.

26,936.—Obsidian, leaf shaped implement, Brit. Guiana? Very Rev. Dean Harris.

26,937-8.—Obsidian arrowheads, Brit. Guiana? Very Rev. Dean Harris.

26,939.—Stone disc, perforated in the centre, perhaps used for gambling. Two and a half inches in diameter, and half an inch in thickness. Lot 10, con. 3, Orillia township, Simcoe county, Ont. Frank Day, Orillia, Ont.

26,940.—Clay pipe, representing a blunt-nosed dog or wolf, lot 10, con. 3, Orillia township, Simcoe county, Ont. Frank Day, Orillia, Ont.

26,941.—Small brass candlestick; may have belonged to some pioneer Catholic missionary's portable altar, lot 10, con. 14, Orillia township, Simcoe county, Ont. Mrs. R. Anderson.

26,942.—Clay pipe head, stem broken, lot 10, con. 14, Oro township, Simcoe county, Ont. Mrs. R. Anderson, Orillia, Ont.

26,943.—Clay pipe, slightly imperfect, lot 2, con. 5, Orillia township, Simcoe county, Ont. Wilbert Greer, Orillia, Ont.

26,944.—Clay pipe, eagle-like head, with unusually well moulded wings and tail, lot 2, con. 5, Simcoe county. Wilbert Greer, Orillia.

26,945.—Clay pipe, rudely representing a bird, lot 2, con. 5, Orillia township, Simcoe county, Ont. Wilbert Greer, Orillia.

26,946.—Stone pipe, vasiform, peculiar in what appears to be two stem holes, one small, and one large, almost opposite to each other, lot 2, con. 5, Orillia township, Simcoe county. Wilbert Greer, Orillia, Ont.

26,947.—Stone axe, six and a half inches long, two inches wide, unusually thin, with well ground semi-circular edge, abruptly sharpened and mostly on one side. This axe is apparently the result of modifying a naturally worn stone, lot 2, con. 14, Oro, Ont. J. Stewart Nelson, Orillia.

26,948-51.—Four discoidal brass bangles made from the metal of an old kettle. Surface finds. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,952.—Stone disc, inch and a half in diameter, half an inch thick. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,953.—Stone disc, inch and a half in diameter, three-eighths of an inch thick, well made, partly bored on each side. Lot 1, con. 6, Orillia township, Simcoe county, Ontario. Wellington and Aubrey McPhee, Orillia, Ont.

26,954.—Stone disc, one inch in diameter, not well rounded, hole partly bored on each side, half an inch thick. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia.

26,955.—Stone disc, inch and a quarter in diameter, thickness variable, partly bored on one side. Lot 1, con. 6, Orillia township, Simcoe county. Wellington and Aubrey McPhee, Orillia, Ont.

26,956.—Small piece of red slate irregular in form, perforated, an inch in diameter. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,957.—Unfinished stone pipe-head, quadrangular, boring begun in cross section, deeply notched on back and top front edges. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia.

26,958.—Very small and roughly made clay pipe, bowl wide in proportion to height. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,959.—Small and rudely made clay pipe, stem broken, apparently the work of a child. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,960.—Antler end, four inches long, hollow, bored transversely near middle as suggestive of an Eskimo toggle. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,961.—Well formed representation of a bird's head, hawk, or eagle, from a clay pipe. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,962.—Rude representation of a man's head from a clay pipe. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,963.—Roughly worked piece of steatite, inch and a quarter in diameter, three-quarters of an inch thick, irregularly formed hole with small hole to meet it through the side, probably a section of a disused or broken pipe. Lot 1, con. 6, Orillia township, Simcoe county. Wellington and Aubrey McPhee, Orillia.

26,964.—Bone spear or arrowhead, neck broken, no barbs, well made, four and a half inches long, three-quarter inches wide near neck. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia.

26,965.—Bone arrowhead, two inches long, inch and a quarter from point to point of barbs, well made, no neck. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia.

26,966.—Eleven cylindrical white glass beads. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey Orillia, Ont.

26,967.—Four cylindrical blue glass beads. Lot 1, con. 6, Orillia township, Simcoe county, Ontario. Wellington and Aubrey McPhee, Orillia.

26,968.—Eighteen blue glass beads of various forms. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,969.—Fourteen variegated small Venetian glass beads. Lot 1, con. 6, Orillia township, Simcoe county, Ontario. Wellington and Aubrey McPhee, Orillia, Ont.

26,970.—Six brown stone beads of native make from five-eighths of an inch to two inches long. Lot 1, con. 6, Orillia township, Simcoe county, Ontario. Wellington and Aubrey McPhee, Orillia, Ont.

26,971.—Thirteen small discoidal and cylindrical brown stone beads, native make. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,972.—One red coral, and one amber-colored glass bead. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee, Orillia, Ont.

26,973.—Seventy-nine discoidal shell beads (wampum) of native and European make. Lot 1, con. 6, Orillia township, Simcoe county, Ont. Wellington and Aubrey McPhee.

26,974.—Three glass beads. Lot 1, con. 6, Orillia township, Simcoe county. Wellington and Aubrey McPhee, Orillia, Ont.

26,975-8.—Four clay pipes, west quarter, lot 2, con. 5, North Orillia. Archibald Fyfe, Orillia, Ont.

26,979-80.—Two clay beads, globular, about one inch in diameter. These specimens taken from an ossuary are the only two

of the kind, so far as known, that have been found in this country. Lot 2, con. 4, North Orillia, Ont. Archibald Fyfe, Orillia.

26,981.—Gouge-axe (Huronian slate) lot 2, con. 14, Oro township. J. Stewart Nelson, Orillia, Ont.

26,982.—Roughly chipped piece of Huronian slate, perhaps intended for a gorget, lot 2, con. 14, Oro township. J. Stewart Nelson.

26,983-4.—Stone axes, very well made, lot 2, con. 14, Oro. J. Stewart Nelson.

26,985.—Large and well polished stone axe, lot 1, con. 6, North Orillia. John R. Harvey, Orillia, Ont.

26,986.—Stone adze of diorite, five and three-quarter inches long, having what is usually the plainly rounded side, relieved by four shallow flutings, lengthwise, Grimsby, Lincoln county, Ont. Dr. Millward, Grimsby, Ont.

26,987.—Carved head (human) and date, 1776 on piece of lithographic limestone, found by Charles Cooper in the fall of 1899 on the property of Mr. E. D. Smith, near Winona, about a mile east of the McNeilly Mountain road. The boy was digging to get out a rabbit, and found the stone about a foot below the surface. It was purchased from him by Mr. Edgar E. Farewell, of Grimsby, who presented it to the museum.

26,988.—Birch bark box, $9\frac{1}{2} \times 6 \times 3$ inches, ornamented with undyed porcupine quills. The work on the lid is said to be an imitation of some painting on a rock which, a few years ago, fell into Lake Couchiching. According to Mesquab, (Jonathan Yorke, the Rama Indian who made the box), the picture represents two Ojibwas, and a Mohawk, the latter being clubbed by one of the former.

26,990.—Skull of Hindoo, Oojain, Central India. Dr. T. W. Beeman.

26,990.—Skull of Indian, Dalhousie Lake, Lanark county. Dr. T. W. Beeman, Perth, Ont.

26,991.—Skull of monkey. Dr. T. W. Beeman, Perth.

26,992.—Large, grooved, hammer stone, North-west Territory, or Lake Superior district. Dr. T. W. Beeman, Perth, Ont.

26,993.—Large, grooved, hammer stone, North-west Territory, or Lake Superior district. Dr. T. W. Beeman, Perth, Ont.

26,994.—Double-pointed stone tool, much weathered, seven and a half inches long. Peter Dowdall, lot—, con. 4, Drummond township, Lanark county, Ont. Dr. T. W. Beeman, Perth, Ont.

26,995.—Large and roughly made celt of Huronian slate, Elmsley township, (Rideau Lake shore) Lanark county. Dr. T. W. Beeman.

26,996.—Small and imperfect celt, Elmsley township, Lanark county. Dr. T. W. Beeman, Perth, Ont.

26,997.—Cylindrical soap stone pipe, with small projection for stem attachment, slightly incised with lines parallel to edge, and others running diagonally. Probably of recent make. Drummond township, Lanark county. Dr. T. W. Beeman, Perth, Ont.

26,998.—North-west stone pipe, with flaring bowl. Dr. T. W. Beeman, Perth, Ont.

26,999.—Slate gorget or pendant, with one unusually large hole

which shows signs of much wear, Camden township, Addington county. Dr. T. W. Beeman.

27,000.—Slate (Huronian) gorget, one hole, showing no sign of wear. This specimen is beautifully veined, Camden township, Addington county. Dr. T. W. Beeman.

27,001.—Small, huronian-slate bird-amulet. Lot —, con. 8, Drummond township, Lanark county. This the most easterly point from which any specimen of this kind has been reported. Dr. T. W. Beeman, Perth, Ont.

27,002.—Large and well formed egg-like piece of soapstone. Probably of recent make, Rideau Lake shore, Elmsley township, Lanark county. Dr. T. W. Beeman, Perth, Ont.

27,003.—Brass bracelet, brought from North-west after the Riel Rebellion, and said to have been the property of Big Bear. Dr. T. W. Beeman, Perth, Ont.

27,004. Boer pipe (native make). From near Belmont, Orange Free State, Africa. Dr. T. W. Beeman.

27,005-6.—Two imperfect pieces of ancient Mexican pottery, both affording evidence of manufacturing methods. Dr. T. W. Beeman.

27,007.—Indian skull, lot 2, old market block, town of Orillia. The body was buried about two feet six inches deep, and the skeleton is said to have measured six feet four inches long. The body lay with the head to the west, and having the hands crossed in front. J. Hugh Hammond, Orillia, Ont.

27,008.—Twelve strings of cylindrical wampum, European make, presented by F. Lamorandiere, of Cape Croker, Ojibwa Reserve, per H. G. Tucker, Barrister, Owen Sound, Ont. Two of the strings consist wholly of white beads, the others of purple and white, arranged four and five of the former from two to three of the latter. Mrs. Lamorandiere formerly Mrs. Benoit, received these from her mother, Mrs. Gonneville, to whom they were given by Mrs. Piché, an Objibwa woman of Saugeen or Sauging. The beads were regarded by the family as entitling the holder to a portion of land, in what is now the County of Bruce. The strings are twelve inches long, but were probably much longer at one time. See description elsewhere.

27,009.—Imperfect tablet or gorget (two holes) from Tuscarora Reserve. Jacob Hess, Six Nations P.O., Ontario.

27,010.—Small and well made stone adze. Tuscarora Reserve. Jacob Hess, Six Nations, Ont.

27,011-15.—Five Iroquois dance masks, collected by Jacob Hess from members of the band on the Tuscarora Reserve.

27,016-8.—Three skulls from grave in town of Orillia on property of Mr. Willey. Mr. Willey, Orillia.

27,019.—Bone whistle, (?) lot 11, first range, South Hamilton and London Road, Brant county, Ontario. Walter M. Dick, Brantford, Ont.

27,020.—One cast of bird-amulet found in Manvers township, Durham county, Ont. J. G. O. D'Olier, Rochester, N.Y.

27,021-2.—Two casts of pipes, found in Manvers township, Durham county, Ontario. J. G. O. D'Olier, Rochester, N.Y.

27,023.—Cast of Catlinite disc pipe, found 13 miles north-west of Lansing, Mich. E. R. Grinald, Grand Ledge, Mich.

WILSON COLLECTION, HISTORICAL SECTION.

The following have been presented to the Historical section of the museum by Mrs. George H. Wilson, of Toronto. They were in the family of her late husband, a well-known citizen, who was for many years connected with the Bank of Montreal in this city.

- | | |
|---|--|
| Gold plated military gorget. | Old safe. |
| Wooden snuff box. | Six chairs. |
| Alpine horn. | One bake kettle. |
| Four school medals. | Two Montreal pennies. |
| Watch fob ribbon. | Two Montreal coppers. |
| Masonic certificate. | Eye glass (gold rimmed.) |
| Masonic apron. | Military belt buckle. |
| Pair of ear rings, coral, plain. | Ten embroideries. |
| Man's tie pin with turquoise. | One pair satin slippers. |
| Bead bracelet with gold clasp. | One family bible. |
| Small cameo, female figure, unmounted. | Two walking sticks. |
| Brass medal holder. | Three fencing foils. |
| Piece of corded silk for necktie. | One fencing mask. |
| Bead purse. | One single-stick. |
| White clouded agate brooch. | One pair guards. |
| Small agate brooch, without pin. | One bow and arrow. |
| Quadrangular polished agate, unmounted. | Two dress swords. |
| Gold seal, "G. W." | One chief's gun. |
| Pair of epanlets (officer's). | One musket. |
| Ramsay's songs, one volume. | One constable's baton. |
| Snuff box, portrait, round. | One cocked hat. |
| Snuff box, black, oval. | Two handkerchiefs. |
| Snuff box, plain, round. | One shako. |
| Two pairs shoe buckles, black. | Two military coats. |
| One pair bracelets, black. | One photo, Mr. and Mrs. Wilson. |
| Two odd bracelets. | Picture, Miss Grace Wilson. |
| Eye glass and silver chain. | Picture, Bailie Andrew Wilson. |
| Old steel bangle purse. | Officers, Bank of Montreal, 1877. |
| Five rings and small pin in box. | Mr. Wilson, horseback, water color. |
| Pewter snuff box. | Chamois leather vest. |
| Ivory match safe. | Picture, La Vivandiere. |
| Six souvenirs of St. Bernard, Switz. | Steel engraving, card players. |
| Lances, in case. | Steel engraving, woman by waterside. |
| Three old shirt studs. | Officers, Bank of Montreal, 1885. |
| Ambrotype and photograph in case. | Picture, St. Andrew's church, Toronto. |
| Three Billing's medals. | Lyceum Theatre hand bill. |
| One Billing's diploma. | Paste board hat box. |
| Tortoise shell spectacles and case. | One lime coated horse shoe. |
| One small religious book. | Two pairs of pistol cases. |
| Powder horn. | Two samplers. |
| | <i>Loaned.</i> |
| Silver snuff box. | Four silver-plated candlesticks. |
| Pewter snuff box, Mr. G. Wilson. | One gravy spoon. |
| Four brass candlesticks. | One habitant sash. |

NOTES ON SOME SPECIMENS.

HAMMER OR PESTLE.

The tool figured here (figure 1, 5,222), seemed to have served the double purpose of pestle and hammer. The upper end bears testimony to the latter use, while the lower end has been rubbed down to an even surface as if intended for use in grinding.

While admirably suited for either purpose, this stone is not as symmetrical all round as it appears to be from the side pictured, but, as with some other specimens referred to in this report, the stone was no doubt chosen because of its naturally handy form. It was found in the Rideau Valley, and was presented by Dr. T. W. Beman.

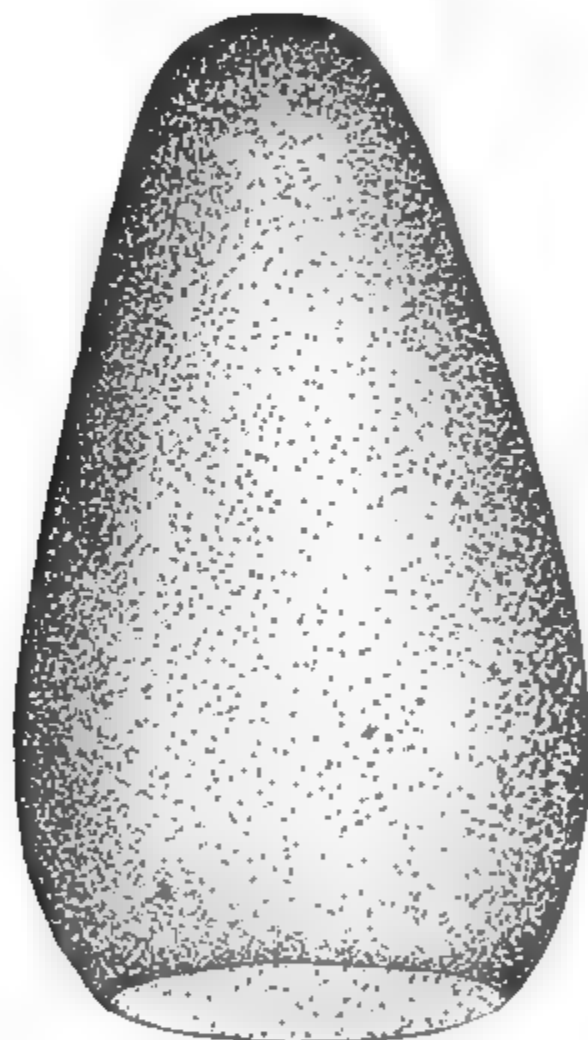


Fig. 1. (5222) full size.

RUBBING STONES.

It is seldom that one meets with a rubbing-stone which so clearly tells its own story as the one represented by figure 2, (6,294) does. The piece is of Hudson River sandstone, as is apparent from its color and cleavage, and from its bearing on the under side an impression of *Avicula demissa*, a characteristic fossil of the formation in question. Plain, smoothing stones of this material, are not uncommon, but of fluted, or deeply-grooved like this one, specimens are very rare in Ontario.

Besides the five grooves as shown in the engraving on one side, there is a shallow one on the under side, in addition to three short cuts made by a sharp tool.

No doubt this stone was chosen on account of its abrasive quality, but it is somewhat puzzling to know what objects were polished by rubbing them in such grooves, especially the curved ones.



Fig. 2. (6,294) full size.

This interesting "file" was found in Brantford township, by Mr. F. W. Waugh, and forms part of the Waugh collection in the Provincial Museum.

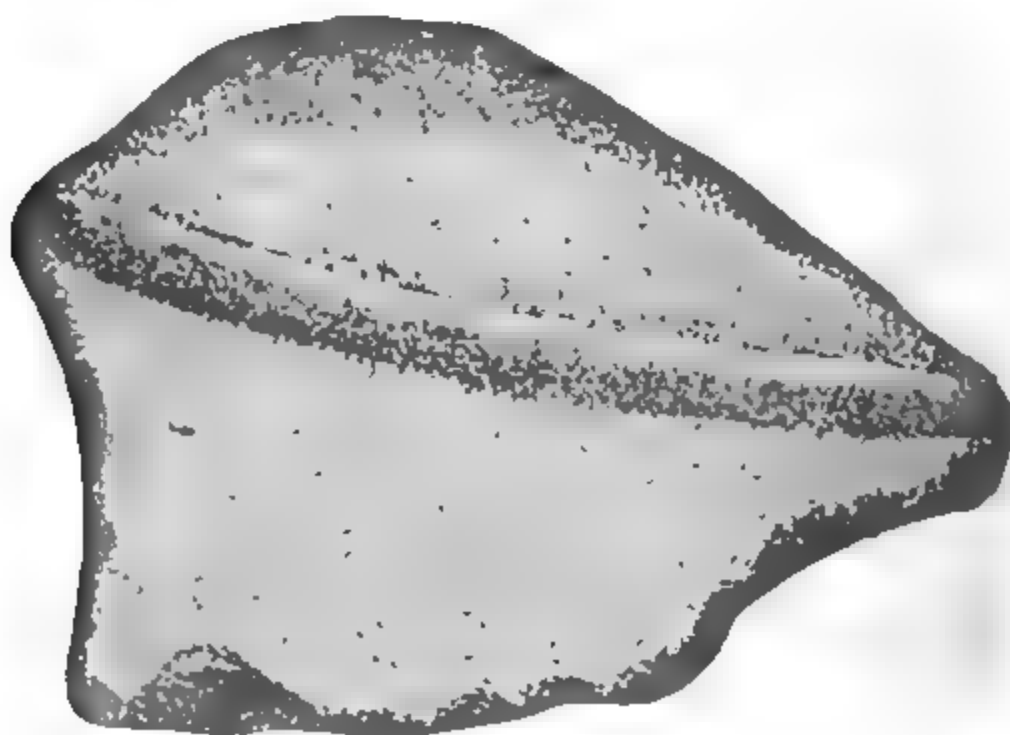


Fig. 3. (28,908) about $\frac{1}{2}$ dia.

Another and a much larger specimen of this kind is figured here (figure 3, 23,968) from lot 17, concession 12, Blenheim township. It is of coarse, gritty limestone, and has on its surface only one groove eight inches and a quarter long, from five-eighths to three-fourths of an inch wide, and from three-eighths to three-fourths of an inch deep. The ungrooved portion of the stone has also been used for rubbing purposes.

This specimen is part of the W. J. Wintenberg collection.

WOMAN'S KNIFE, (UNFINISHED).

The appearance of the woman's knife—broad and thin—would lead one to suppose that in every case the article had been produced

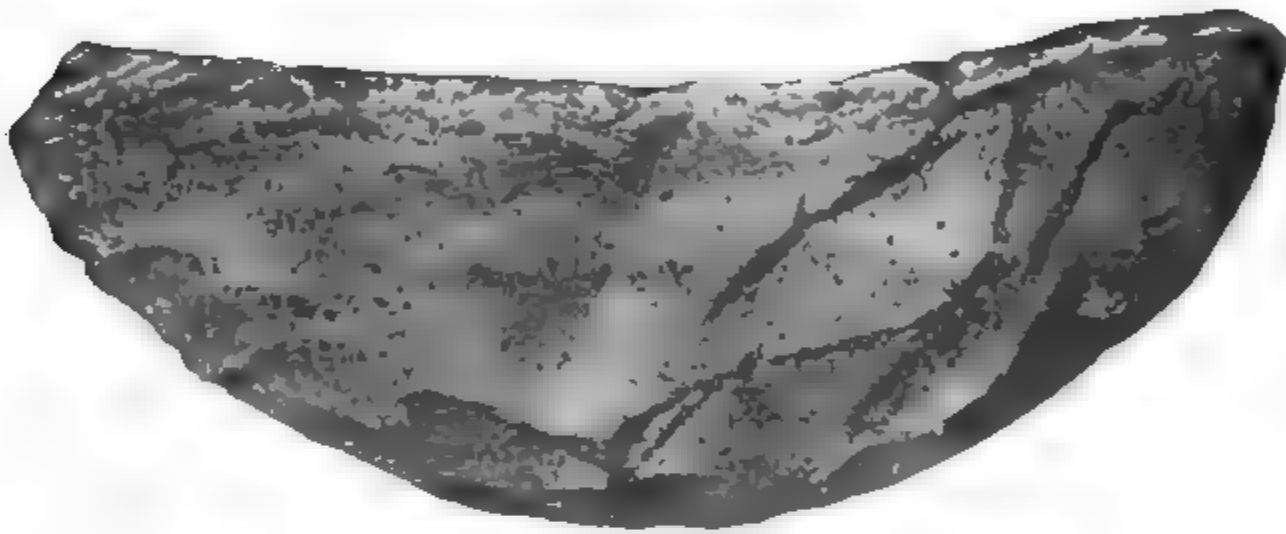


Fig. 4. (1,590) full size.

from a piece of easily split schist or slate. No doubt material of this kind was chosen when procurable, but Huronian slate, which seems to have been the preferred kind of stone for this and a few other purposes, does not lend itself readily to the splitting process, and the thinness to which such implements have been reduced is, probably, to a large extent, the result of rubbing down. Unfinished, or only partly made specimens of this kind are comparatively rare, but the few that have been found indicate the necessity of much grinding or rubbing to bring them into shape.

Figure 4, (1,590) was found by Mr. Robert Martin on his farm lot 27, con. 6, Scarboro township.

Until a somewhat recent date, tools of this kind were in use among the Eskimo.

STONE FILE.



Fig. 5. (5,920) full size.

Figure 5, (5,920) illustrates a nondescript sort of tool, or appliance of fine bluish schist. Perhaps the word *file* would describe this if we may be guided by the appearance of the more irregular edge the surface of which is scratched in such a way as to suggest either rubbing, or being rubbed on. The broader end looks as if it had once been sharpened, so that perhaps we here have a degraded celt, the "grit" of which suggested the secondary use. The angle of the worn edge indicates that the tool was probably held in the left hand, the thumb pressed against the side shown in the cut, while the object to be smoothed or polished was worked against it in the right hand.

The tool here figured was found on the Aaron Main farm, lot 8, concession 5, Beverly township, Wentworth county.

TOOTH TOOLS.

In the absence of metal, man is compelled to make use of many devices to supply his wants, and this is perhaps more apparent where tools are concerned, than in connection with any other phase of savage life. In America, even his employment of native copper served him but poorly, for notwithstanding the silly, popular belief about his ability to temper this metal in order to produce a good cutting edge, we know that he was driven to use not only stone, but bone, and horn (antlers) when he required effective tools.

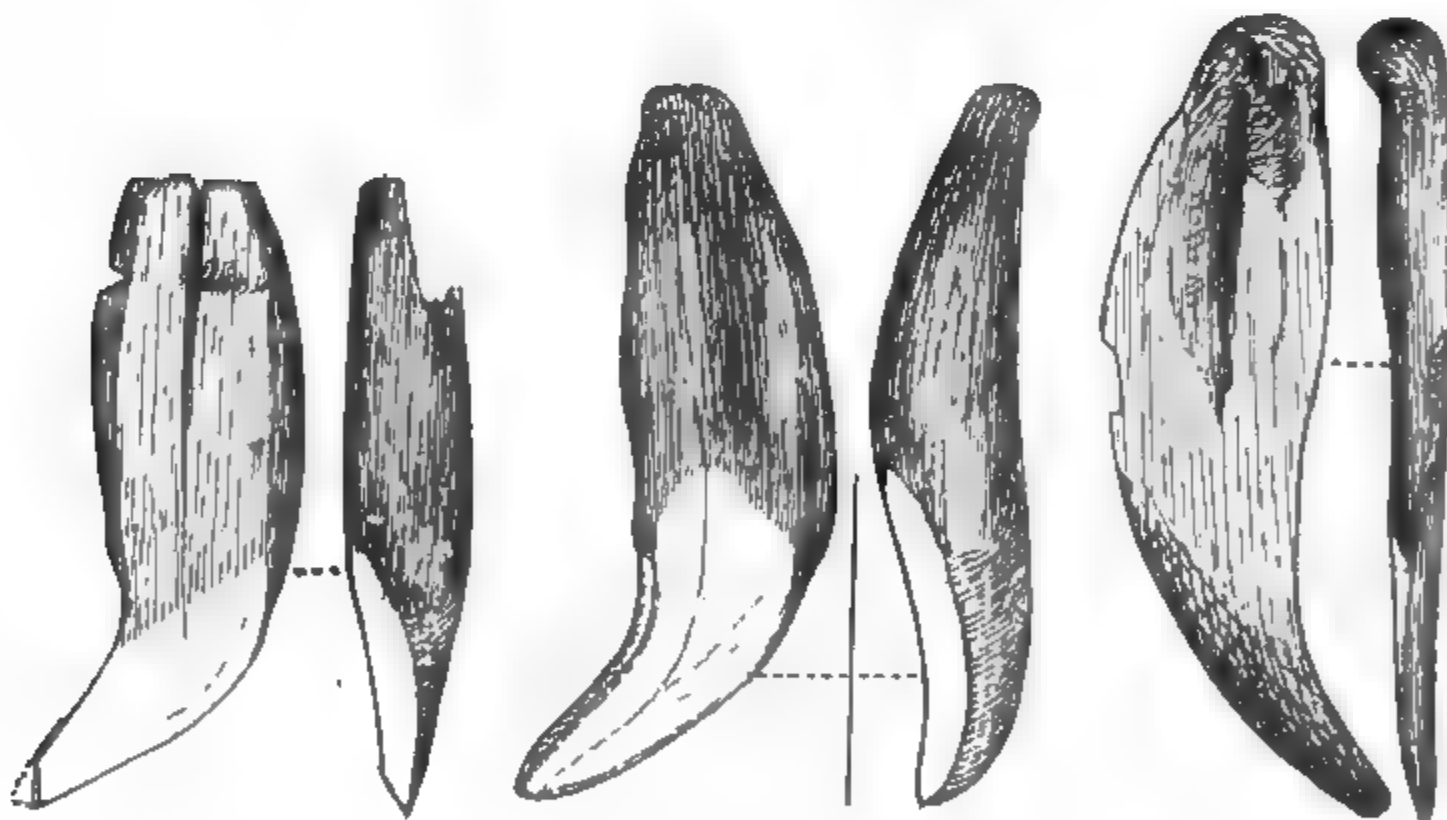


Fig. 6. full size.

Fig. 7. full size.

Fig. 8. full size.

Everyone who has examined even very small archæological collections must have observed this, but teeth, too, were utilized for several purposes, although to a more limited extent.

The largest teeth available for such uses were those of the bear, and the beaver. The canines of the former were ground or rubbed down in two ways—one, reducing the naturally exposed end of the tooth to about half its original thickness, thus forming on the convex edge an angle that would have proved serviceable as a scraper either in dressing skins, or in rounding and smoothing arrow-shafts.

Tried on wood, both hard and soft, it does very good work. Figures 6 and 7 from the Laidlaw collection (Balsam Lake district) illustrates this method of shaping.

Another way of forming a much sharper cutting edge was to rub down the tooth considerably beyond the middle of its thickness as shown by figure 8, which also seems to have been at first split and afterwards ground down until not more than a quarter of an inch thick at the thickest part. A simple cutting-tool of this kind might be dignified with the name of "knife," and, as such, it was probably used.

In Europe, as well as in America, early man made use of the beaver's incisor teeth as tools, although in the former continent, in a way, of which, so far as I am aware, no example is positively known on this continent. Our old-world ancestors, taking their clue no doubt from the animal's propensities for gnawing, fitted the teeth to handles as shown by figure 9, from a specimen in the British Museum.*



Fig. 9.

The tool, of which this is a picture, was probably used as a chisel.

Notwithstanding the immense number of beavers that must have fallen into the hands of Canadian Indians, few traces of the animal are found on old camp or village sites, anywhere in the Province. This may be owing to a custom requiring all the remains of these animals to be burnt, and thus prevent them from becoming the prey of dogs, a contingency which, on becoming known to the beavers, would render other captures very difficult, if not impossible!

Although as has just been mentioned no example has been found in this country, corresponding to figure 9, it may be that this is owing to the decay of the handle and its wrappings, while the teeth themselves would scarcely show anything to indicate artificial use.

But we know that the Indian used beaver teeth in another way, and most of the evidence comes to us from finds made by Lieut. George E. Laidlaw in the course of his thorough examinations of

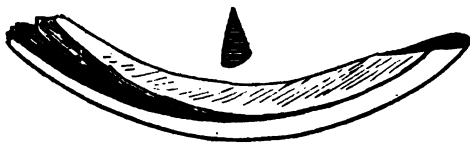


Fig. 10. full size.



Fig. 11. full size.

ground in the townships surrounding Balsam Lake. The specimens from the neighborhood in question are frequently found split, or

*With the consent of the publisher from an engraving, in *Castorologia, or the History and Traditions of the Canadian Beaver.* By Horace T. Martin, F. Z. S., etc., Montreal, Wm. Drysdale and Co., 1892.

ground down to less than half their original thickness, and highly polished on the inner, or fractured sides, so as to make the concave edges quite sharp. Similarly, the convex edges, as shown in the engravings, are brought into good shape for scraping. The smaller diagrams above figures 10 and 11 show how the teeth look in cross-section. We are quite in the dark respecting the way in which specimens of this kind were used, and as everything connected with our national totemic animal should be interesting, it would be very gratifying if we could find out how beaver-tooth tools were employed.

Archæologically we are not likely to meet anything but teeth to remind us of the immensely important part played by the beaver in time prehistoric, and, perhaps even less, to call up historic reminiscences, but it can do no harm to remind our young folk that during a great part of the eighteenth century, as well as for nearly all the first third of the nineteenth, goods of every kind were valued by the traders, according to the beaver-skin standard. In 1733, at Moose River, a single skin was equivalent to half a pound of white beads, or three-fourths of a pound of colored beads, or two pounds of sugar, or two yards of gartering, or twenty fish-hooks, or twelve needles, or a pair of shoes, or four spoons, while as many as from ten to twelve skins were required to pay for a gun, four for a gallon of brandy, six for a blanket, and one and a half for a handkerchief. When the fur trade was at its best, as many as 300,000 beavers were killed annually.

For much valuable information about the beaver, readers are referred to the book already mentioned.

STONE AXES.

Strong as is the similarity among stone axes or celts from all parts of the world, yet there are peculiarities that characterise such tools within given areas. He would be but an indifferent student of archæology who would have any hesitation in pronouncing diagram 12, (22,621) as that of a tool not belonging to Ontario, no matter where it might have been found. It is sometimes urged by even intelligent museum visitors that they cannot see the use of so many things of the same kind in a collection. It is quite true that in a general way there is a strong similarity among native made tools, but not nearly so much as there is among those of European origin, and it is not seldom that just because of a slight variation in one of the former, we may find a clue to something hitherto dubious. In addition to this, we have the well-known fact that the "larger the number of instances, the safer it is to generalize." Notwithstanding, then, that in celts there is a sameness—the wedgelike form—there are also differences that enable us to distinguish those that have been made by peoples occupying widely separated areas.

In Ontario, grooved specimens are rare when compared with those not so marked, and when the groove does exist we know at a glance the latitude to which the tool belongs. In this and similar ways it is possible to recognize what may be called an imported specimen.

The axe here figured is one of these. It came to us from Mrs. Scatterd, Arizona, and is here illustrated to show the great differences between axes from that quarter, and those from this province.

About two years ago a correspondent wrote from Wisconsin asking whether we had ever found any fluted axes in Ontario. The answer was, "no." It was inferred from the note of enquiry that celts having longitudinal grooves on one side were not uncommon in that State; until this year, however, nothing of the kind had appeared here, as far as known.



Fig. 12. (22,621) $\frac{1}{2}$ diameter.



Fig. 13. (26,966) full size.

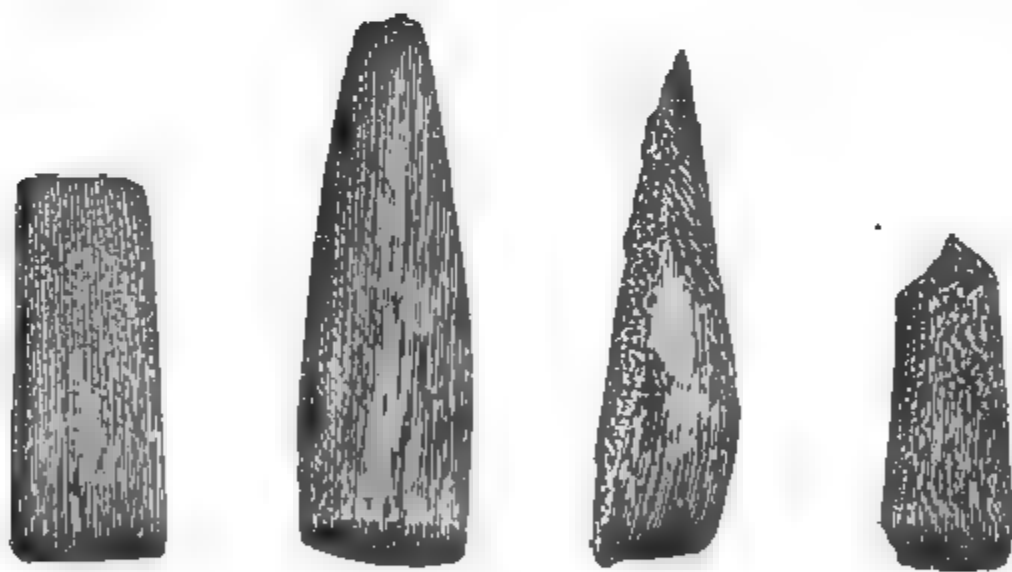
When on the search last summer for the "American Gentleman's" cave, elsewhere referred to, a specimen of the kind in question was found in the private collection of Dr. Millward, of Grimsby, Lincoln county, who very kindly presented it to the Museum. This wholly novel type of tool was found near Grimsby. It is five and three-fourth inches long, and fully an inch in thickness near the

middle, figure 13, (26,986). It is an adze rather than an axe, and it is on the rounded side the fluting occurs. On the diagram it will be seen that there are four of the so-called flutings on the Grimsby tool, but they are not so sharply ridged as the diagram would indicate. The two middle grooves are most markedly concave, while the one to the right is scarcely at all so. The two edges also are slightly hollowed from end to end. In other respects there is nothing to distinguish this adze from scores of similar tools, but the peculiarities mentioned lead to the inference that the implement came here from the west.

It would be interesting to learn from any in Ontario into whose hands this report may fall, whether similarly made tools have come to their notice. Before I had an opportunity to examine a stone adze in its original handle, my impression was that the flat face lay next to the wood, in such an arrangement as is exemplified by figure 86, but as soon as I saw the round side fitted into a corresponding hollow in the wood it was very easy to perceive the great advantage thus derived in point of steadiness to the head, when the tool was in use. In the same way one may readily understand how much more solidly a fluted side would fit into a receptacle, than a smooth one would.

CHISELS OR CLUB SPIKES.

Such small cutting tools as are represented by figures 14, (24,291 Wintenberg), 15 (T. W. Beeman), 16 (7,493 G. E. Laidlaw), and 17, (24,306 Wintenberg) are not at all common, and yet, their seeming rareness may be owing to their small size to some extent, for a



Figs. 14 (24,291), 15 (164), 16 (74,930), 17 (24,306), full size.

specimen of this kind might easily be overlooked in a heap of earth. All those referred to were found on the surface. By all odds the best is the Beeman specimen, for it is as carefully formed and finished as are many of the larger tools of a similar shape. It is difficult to imagine any mechanical use to which such diminutive specimens could be put, and it has been suggested that in all likelihood they were made to insert in club-heads.

STONE GOUGES.

Much has already appeared in our reports respecting gouges, specimens of which vary even more in general form, as well as in detail, than any other kind of stone tool found in Ontario.



Fig. 18 (9,852) full size.



Fig 19. full size.



Fig. 20 (19,831) 3-5 dia.

In several respects the one illustrated by figure 18 (9,852) is the best in our collection. The stone is a dark brown argillite, a little over eight inches long, while the greatest width is an inch and five-eighths. It is very neatly hollowed as far back as three inches from the lip, and it tapers more rapidly than most gouges do, towards the head.

The chief peculiarity, however, consists in the chamfering which

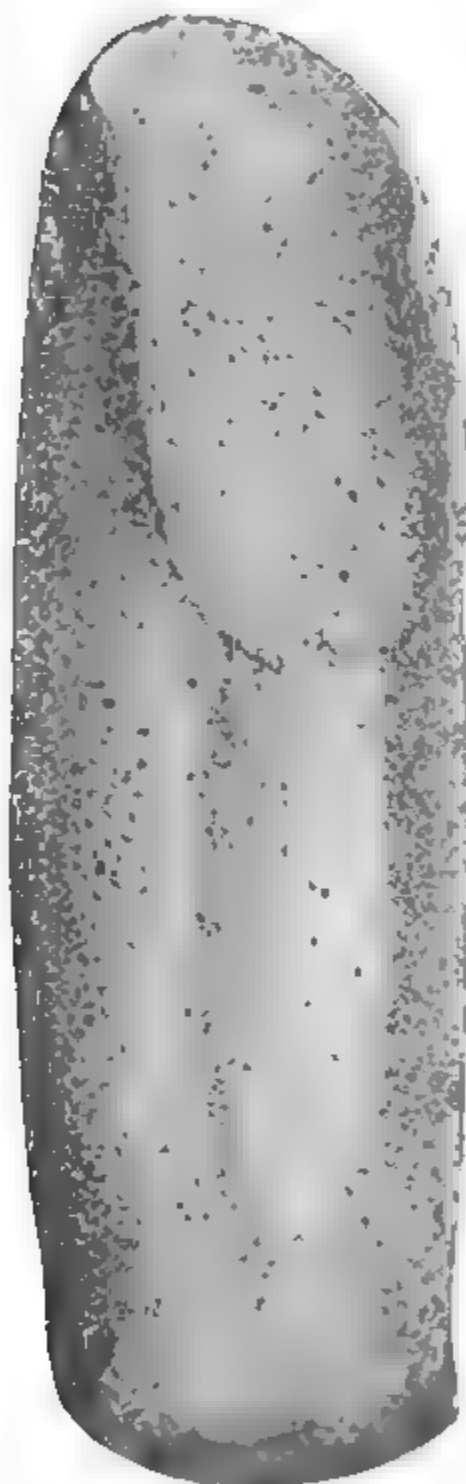


Fig. 21. (9,895) 5-6 dia.



Fig. 22.

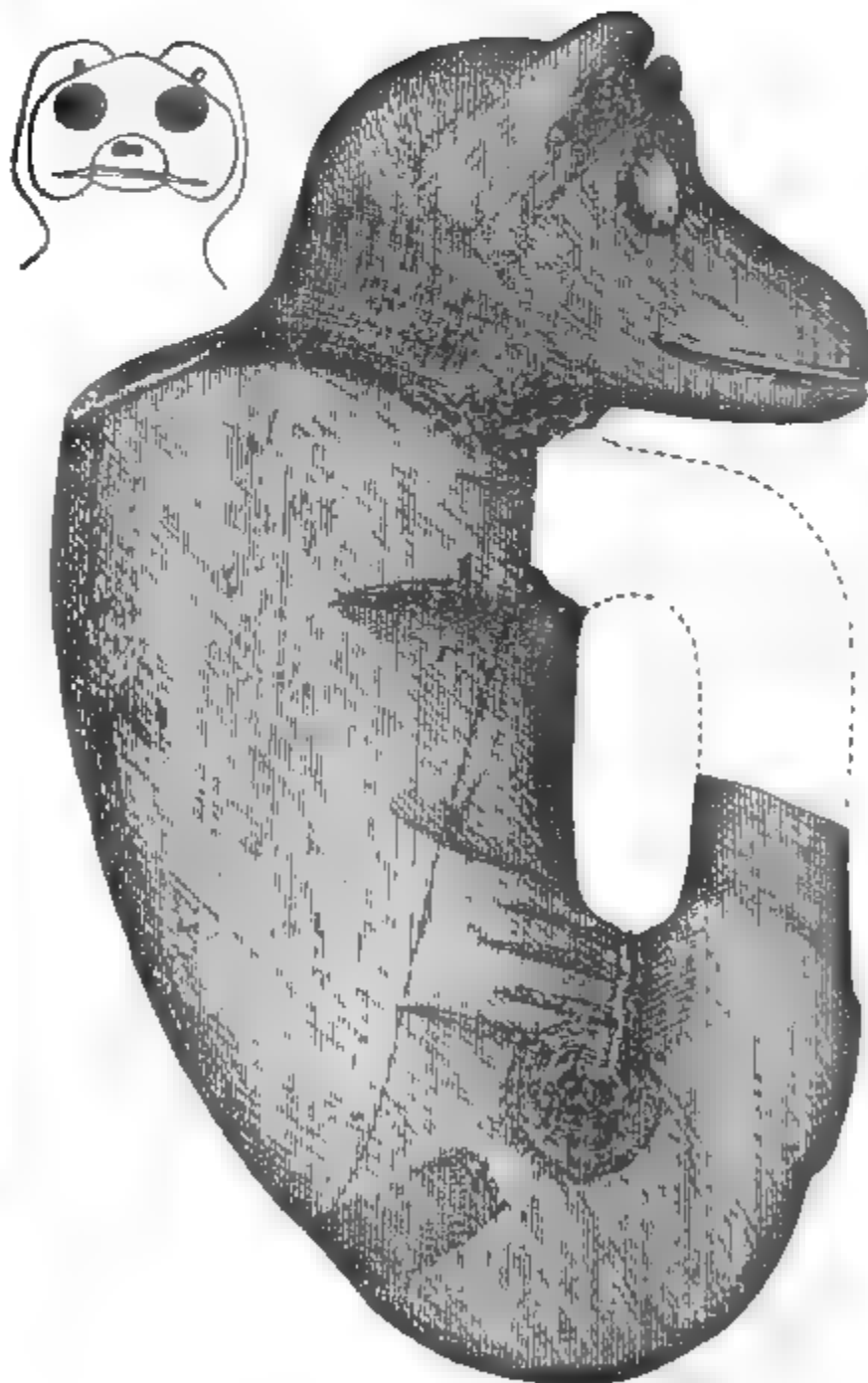


Fig. 23. (26,754) $\frac{1}{2}$ dia.

has been done on all the corners, and especially on the back ones. The diagram of a cross section, nearly half way down, (fig. 19) shows the extent of this work.

This beautiful implement was noticed in the report for 1894-5, p. 68, but the illustration was a very poor one.

Figure 20, (19,831) represents a kind of stone tool somewhat uncommon, serving as it did for a gouge at one end, and for an axe or adze at the other.

Tools of this kind were probably held directly in the hand when in use.

Figure 20 is the largest we have of this axe-gouge type, and was procured for use by Mr. Aubrey White, Deputy Commissioner of Crown Lands, when he was at Lake Temagaming, in Nipissing district. In general appearance it resembles others of this kind, but is considerably larger, being more than ten inches long, while it is two inches and a half wide, and an inch and a quarter thick. It is of slate.

Of the same type as far as the double duty is concerned is the specimen figured by 21, (9,895), but in other respects it is totally different. The stone is a gray granite, a much harder, but not necessarily more difficult kind of material to work than slate, and one which was, perhaps, not capable of retaining its edge so long.

This tool is six inches and a half in length, averages two inches in width, and is an inch and three-eighths in thickness at the thickest part—the back being very much rounded lengthwise as well as crosswise.

A peculiarity of this tool is the slight hollowing which has been done in line with the half-inch deep groove that forms the gouge end, and almost connects it with the axe end.

The latter is peculiar, too, in having the corners of the axe edge slightly flared, an effect we sometimes see as the result of hammering on the edge of native copper.

This specimen was found in the township of Tiny, and was presented to us by Mr. James McCrossen, warden of the reformatory, at Penetanguishene.

The small gouge, figure 22, is a very good example of the old workman's make-shift. The piece of stone from which this tool was made is even yet little better than an accidental form, the broad end of which is hollowed. A little rubbing down, too, has also been done on the lower side. The material is Huronian slate. When seen from the other side, this little tool is much less symmetrical than it appears to be in the cut. It was found in Victoria county, by Mr. G. E. Laidlaw.

STONE PIPES.

By all odds the largest, and in some respects the most remarkable effigy stone pipe, or pipe-bowl, ever found in Ontario is the one here illustrated, figure 23, (26,754). It was a surface find by Mr. T. W. Newberry, on lot 6, concession 20, in the township of Tiny. From his hands it passed to those of our friend, Lieut.-Col. G. E. Laidlaw, from whom we procured it. It is six and three-quarter inches in height, and weighs two and a half pounds. The material is of a dark gray colour, not very hard, and suggests Trenton limestone, but it does not answer to the acid test.

This huge specimen differs very much in many ways from the large Huronian slate pipe presented to us last year by Mr. Cary W. Hartman, although in a general way the idea involved in the shaping of both has been similar.

Only for what may be regarded as its long tail, we might suppose a bear to be the animal represented, and even should we take it to

be intended for a wolf, the same difficulty exists though to a less extent. Unfortunately fully half of the tail has been broken off and lost, but from the appearance of other specimens somewhat alike in form, as well as from the two fractures, we are safe in marking the supposed outline of the complete appendage.

Touching what has recently been brought up relating to the origin of stone, effigy-pipes, one is disposed to wonder what could have been the European prototype of such a specimen as this is. The surface has been brought to a condition of smoothness, but not sufficiently so to remove all traces of the scratches that were made in so doing, and in no case are there any signs of marks other than those producible by the rubbing of one stone on another.

The design is boldly carried out, but there is no nicety of detail. On each side, between the hind feet and the tail, there is the beginning of a hole.

There can be no doubt at all as to what this specimen was meant to be, although it is unfinished, for the beginnings of a large hole on the upper end, and of two others on the back, show that the maker wanted to produce a pipe. One of the two holes begun on the back is near the lower end, and was, of course, for suspension, and for attachment to the wooden stem.

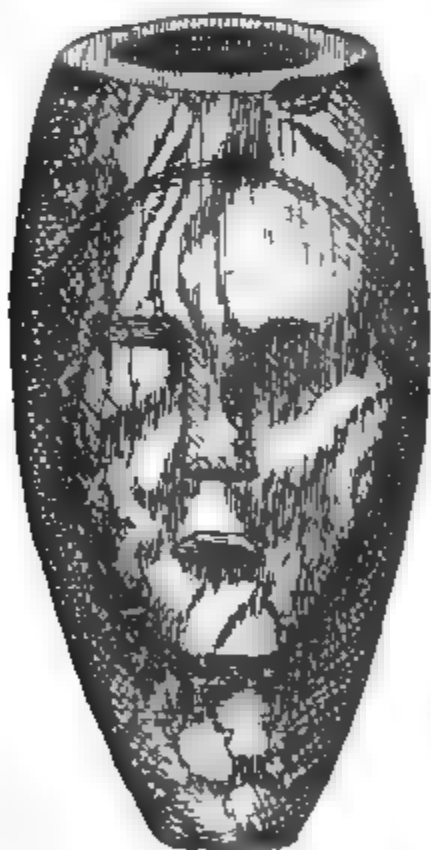


Fig. 24, (26,205) full size.

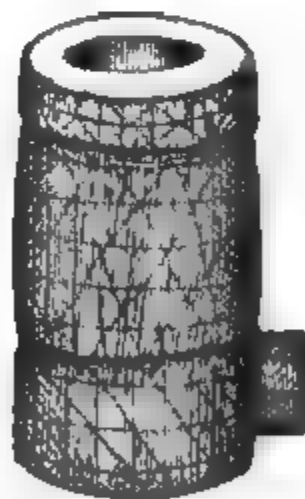


Fig. 25, (26,997) full size.

Palæontologically figure 24, (26,205) is quite as interesting as it is archæologically, for the piece is of black marble thickly studded with small corals, not nearly so many of which appear on the face and back as on the sides, where they are also much less in size than those seen in the cut.

I am indebted to Dr. W. A. Parks of the Toronto University Geological Department for the opinion after a somewhat hasty examination, that the organisms represented in this specimen include *Diphyphyllum stramineum*, and a species of *stromatopora*.

Found in the very heart of the old Tobacco Nation, Nottawasaga, where the diversity of pipe-forms is not surpassed by that of any

other district on the continent, we are the better prepared to understand that pipe modelling was regarded as a "fine art," and that the stone used in making this intended pipe was regarded by the primitive artist as a gem.

The original of figure 24 was presented with numerous other specimens to the Provincial Museum by Mr. F. W. Storry, an ardent and intelligent student of old times in the Huron country.

It is not unlikely that the soapstone pipe-head of which figure 25, (26,997) is a diagram, was made by a white man, or by an Indian of comparatively recent date, and acted upon by some measure of "white" inspiration.

It was found in the township of Drummond, Lanark county, and was procured from Dr. T. W. Beeman. The Rideau Valley must always have been a favorite Indian resort, on account of its immense importance in connection with the fur trade, for here were found in considerable numbers not only the larger, wild animals, but the smaller, though equally valuable ones, including the mink, musquash, and beaver. Almost from the landing of Cartier at Hochelaga—certainly before the founding of a city there—the fur-trader looked to the Rideau Valley as a source of trade—barter; and, as a matter of course, the natives were conversant with French conditions of life long before the more westerly peoples had even seen a white man. We accordingly find throughout this district more numerous evidences of white contact, than in most other parts of the province, although the Beeman, and some smaller collections contain many examples of purely Indian production.

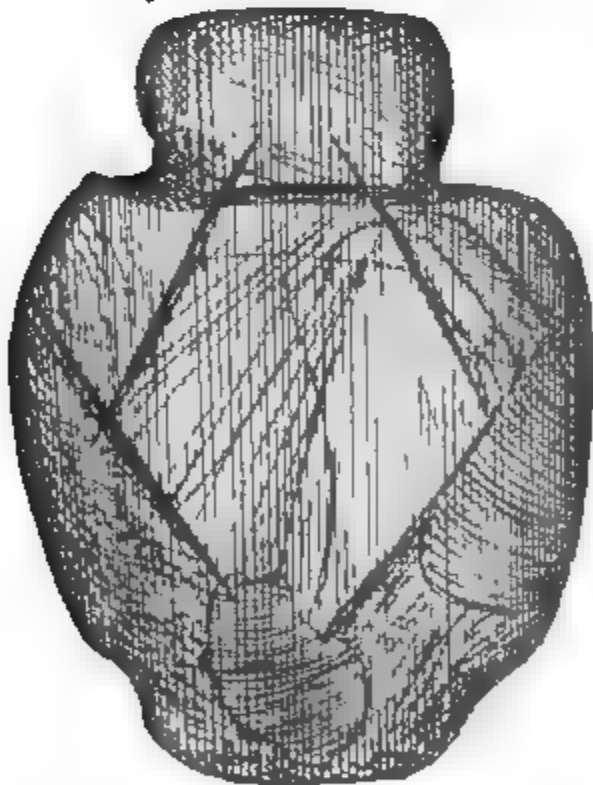


Fig. 26, (25,154) full size.

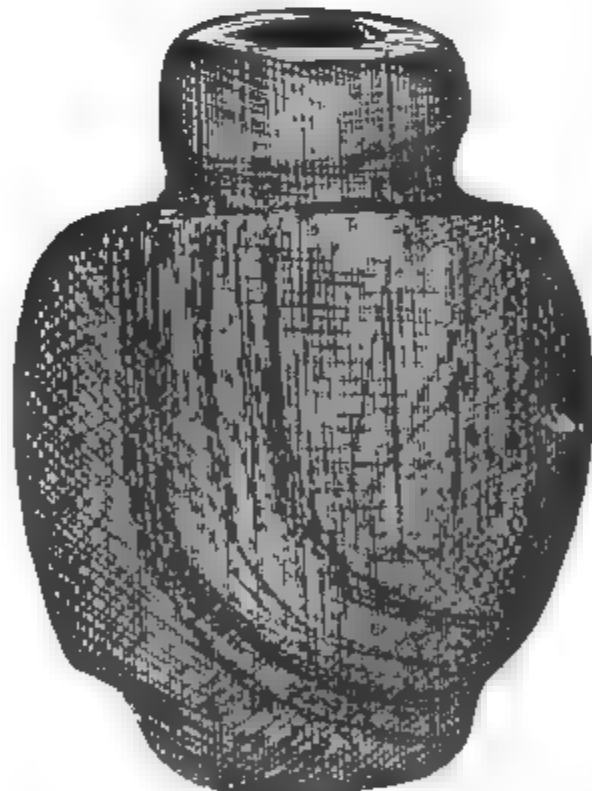


Fig. 27, (25,154) full size.

Unless the object of which two diagrams are shown here, figure 26 and 27 (25,154), was meant to be the head of a smoking pipe, it would not be easy to guess for what else it was intended. It is made of Huronian slate, but notwithstanding the favor in which this kind of stone was held for various purposes, pipe-making was not one of these, if we may judge from our own collection, not more than five or six per cent. of the stone pipes or pipe-heads being made of this material.

The somewhat poorly bored hole is half an inch in diameter, and an inch deep, and to make it serviceable for smoking purposes it was only needful to bore a shallow hole to meet it through one of the sides.

Figure 27 shows a side that has been fairly well rounded and smoothed, but the workman either changed his mind, if he set out to make a pipe or the object fell into the hands of another person, who seems to have made a beginning towards cutting away what he regarded as superfluous material with the intention of forming a lozenge-shaped bowl, as may be guessed from the marks on the side, figure 26.

This somewhat curious specimen came to us in the J. P. Hunt collection, and was found in Middlesex county, Ontario.

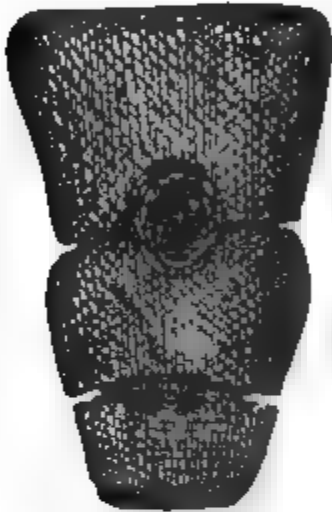


Fig. 28 (19,330) full size.

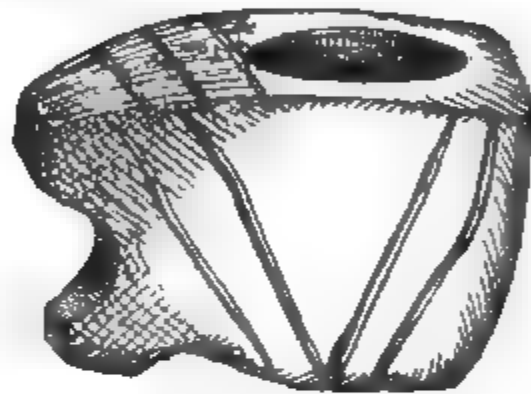


Fig. 29 (21,587) full size.

What is, in some respects, among the oddest of our stone pipes, or pipe-heads, figure 28, (19,330), forms a part of the Laidlaw collection, and was found with other specimens by Mr. W. C. Perry, on lot 45, concession 8, township of Eldon. It is of soapstone, but is peculiar in being deeply incised, by means of two cuts surrounding the head, and these were made probably with chert or flint flakes. The cuts are apparently the work of one who was a much less skilful craftsman than was he who first fashioned the bowl, for while the original form of the latter was accurately symmetrical as such things go, the former have been very clumsily made, and the cutting-down done by the second workman is quite meaningless. It has been suggested that all the secondary work was done by one who stole the pipe, and was anxious to change its appearance.

Among stone pipe heads a very simple form is that of figure 29 (21,587), found by Mr. Neil Sinclair, on lot 25, concession 2, township of Fenelon, county of Victoria.

This one was made of fine-grained limestone; in shape it is non-descript, unless one's imagination be strong enough to see in it a rough resemblance to the head of some creature, through the open mouth of which the stem-hole has been bored. The rudely incised ornamental lines are not similarly arranged on each side. On the side opposite to the one shown in the cut there are five lines roughly scratched perpendicularly.

CLAY PIPES.

Everybody who has paid the least attention to the archæology of Ontario must have observed that it is mainly on pipe-heads that

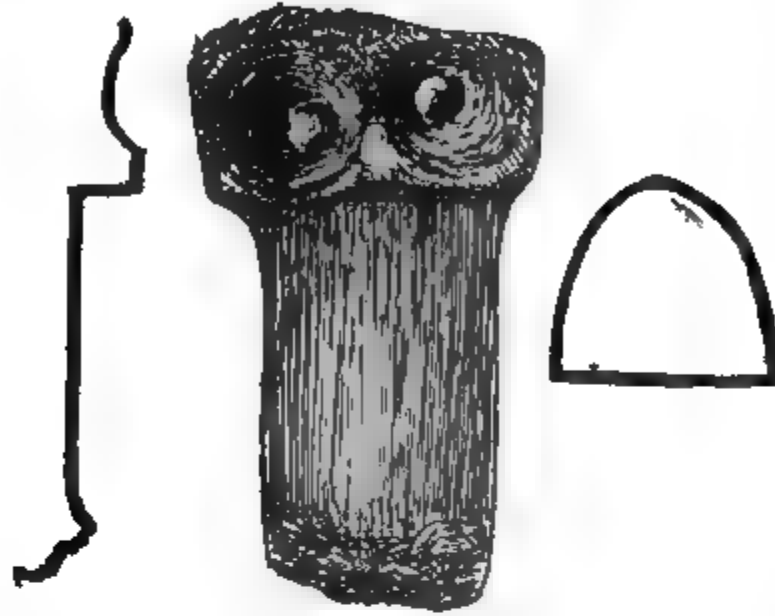


Fig. 30 (19,331) full size.

the Indian made any efforts to reproduce animal forms. Men, bears, wolves or dogs, eagles, hawks, owls and pigeons were favored as models. Seldom more than the head was attempted, and in numerous instances we are at a loss to specify what animal the savage modeller had in his mind. Among the most easily distinguishable are those meant to represent the owl, and figure 30 (19,331), exemplifies what is perhaps the crudest form in which it is possible to



Fig. 31 (26,940) full size.



Fig. 32 (26,940) full size.

imitate in clay, the head of this bird. The apparently disproportionate large eyes have caught the pipemaker's fancy, and these he has tried to imitate by making two deep hollows, near the middle of each of which he has formed a hemispherical tubercle to represent the pupil.

The side of the pipe shown is flat below the eyes, which are moulded on a portion that projects about three-sixteenths of an inch, as is shown by the outline to the left, and the other side is rounded as may be seen by the outline of cross-section, to the right.

At first the pipe was moulded with a stem, perhaps not more than two or three inches long, but this having been broken, a hole has been bored in the round side to receive a stem of wood, or of bone.

This somewhat odd specimen was found on lot 44, S.P.R. Eldon township, Victoria county, by Mr. W. C. Perry, now of Winnipeg, and presented by him to the museum.

Figures 31 and 32 (26,940), represent a clay pipe differing in several respects from anything else of the kind in our cases. The square-like muzzle, the ears, and the arrangement of decorative lines on the head all vary more or less from other Huron specimens.

The stem, as far as it is preserved, is of the true Huron-Iroquois pattern. This very good specimen was found by Mr. Frank Day on a piece of rich, low-lying land, on the third concession of Orillia township, only a short distance from the town.



Fig. 33 (21,508) full size.

Among the many odd forms of pipes in clay as well as in stone, that form a part of the George E. Laidlaw collection in the Provincial Museum, is the fragment shown by figure 33, (21,508), found on the farm of Mr. E. W. Glaspell, lot 18, con. 13, township of Tiny, Simcoe county. As was so common, the effigy bird-head faced the smoker, as may be learned from what remains of the bowl which was formed on the breast. A few of the lines indicating wings are left.

The bowl has been formed by moulding the clay around a rough bit of wood, perhaps a branch.

It would be more than difficult to say assuredly what kind of bird this pipe was meant to look like. Perhaps, none in particular.

BONE.

The bone articles, figures 34 to 36, are commonly regarded as whistles, the only reason being that they look more or less like these simple musical instruments. Attempts to use them as the name suggests, prove failures, although in some cases it is possible to produce sounds with them by closing one or two of the apertures where

there are respectively only two or three. Occasional results of this kind do not prove the original purpose to have been that of a whistle, any more than that tubular door-keys were so intended. When the holes are numerous, a suggested use of the bone is that of a receptacle for feathers, porcupine quills and the like, for personal decoration, perhaps more especially about the head. Employed in some such way, it would be easier to arrange the ornamenting material in one of these and then to fasten it to the hair, than to insert single feathers in the hair without any support, and this would apply with greater force when the person to be decorated had to do the decoration for himself. This is not by any means offered as a theory as to what was the use of such bone objects, but merely to show that there are possible uses besides that of a whistle, and thus to place inexperienced observers on their guard against accepting the too frequently made assertions that this or that was so-and-so, when the truth is that we know absolutely nothing about it.



Fig. 34, (6,326) full size.



Fig. 35, (25,506) full size



Fig. 36, (27,019) full size.

Most specimens of the kind are made of large, bird wing-bones, apparently for the sake of lightness, and, no doubt, also because of their thinness, which rendered the boring or cutting of side holes comparatively easy.

Figures 37, (12,887), 38, (16,622), and 39, (11,687), while made from similar bones, would seem to have had a totally different use

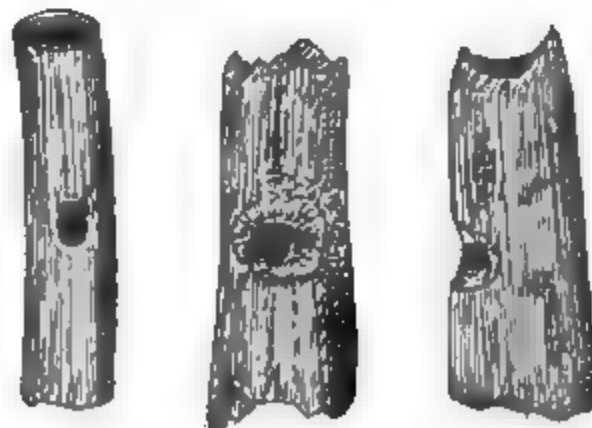


Fig. 37, (12,887). Fig. 38, (16,622). Fig. 39, (11,687).

whatever that use may have been, and yet it is possible that even this surmise is wrong. We have in the Provincial Museum hundreds of what we call bone beads, from an inch to six inches long, but these are seldom found with side holes as shown in the cuts.

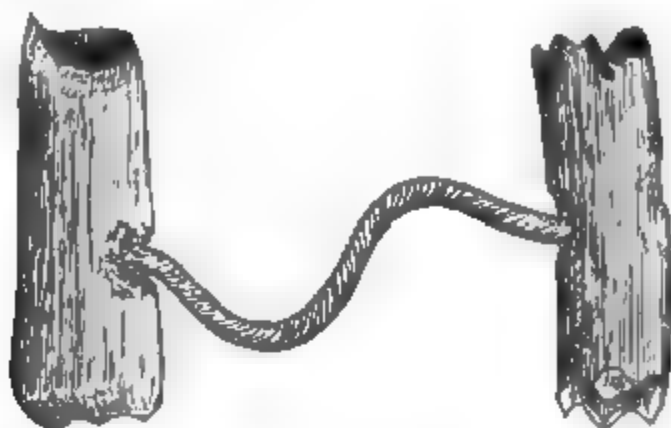


Fig. 42. Full size.

Such small specimens are also called whistles. To me they suggest that they were used as buttons, in the way shown by figure 42.

The two specimens illustrated by figures 40, (16,620), and 41, (16,621), are presumably of post-European origin. Figure 40 seems

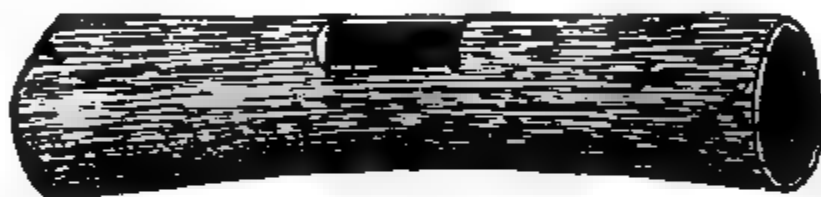


Fig. 40, (16,620) full size.



Fig. 41, (16,621) full size.

to have been indebted to a steel knife for its clearly cut quadrangular hole, and the same may be said of figure 41, the ornamentation of which is also suggestive of the white man, although the work may have been done by an Indian.

Figure 34, (6,326), is from a kitchen midden on Vancouver Island, British Columbia.

Figure 35, (25,505), and figure 36, (27,019), were found on lot 11, first range south, Hamilton road, Brantford township.

Figure 37, (12,887), Woodhouse township, Norfolk county.

Figure 38, (16,622), Old Fort, Whitchurch township, York county.

Figure 39, (11,687), Essa township, Simcoe county.

Figure 40, (16,620), and 41, (16,621), were presented by Dr. W. L. T. Addison, and are probably from York county, perhaps from Whitchurch township.

That some Indians did use bone whistles or flutes we gather from Brown's *Canoe and Camp Life in British Columbia*, p. 158, where this sentence occurs:

"Our approach to a village was always announced by some of our Indians playing a sort of tune on their bone flutes, and our entry into it by their shouts."

Elsewhere it is stated that Guiana instruments of this kind are made from the jaguar's thigh bones.



Fig. 43 (24,191) full size.

What we have called a "carved bead" is illustrated by figure 43, (24,191), in the Wintemberg collection, and was picked up on a village site, lot 23, concession 10, township of Blenheim, Oxford county. It resembles a much larger example, fully six inches long, found by Mr. W. G. Long near Eglinton, in York township, and which is too large to have been used as a bead. The Wintemberg specimen is evidently of considerable age, as it is much weathered, and the side not shown in the diagram is, to some extent, decayed.

BONE ARROW.

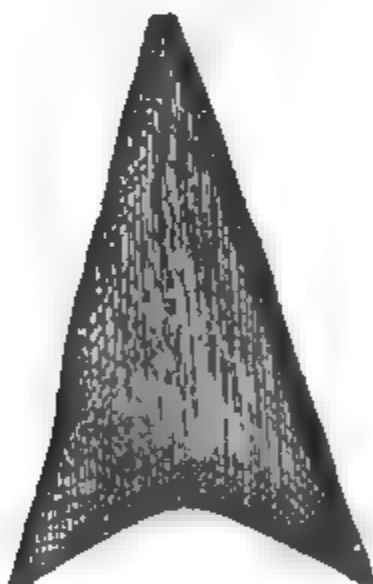


Fig. 44 (26,965) full size.

Figure 44, (26,965), is arrow-like in form, but may have been used as a scraping tool, or in the splitting of splints for basket-making, or for some other simple, but, to us, unknown purpose. As a matter of course, we cannot be sure that it was not used as its appearance would suggest, in which case it would belong to the class popularly known as "war-arrows," because, being without a neck, the saying is, that when a man was struck with one, the head would remain in the body, on an attempt being made to remove it by pulling on the shaft. This is a somewhat ingenious and plausible conceit, but without a particle of proof.

If the specimen here figured was ever used in shooting, it is just as likely as not that it was extemporised owing to the want of better material.

Forms of this kind in bone are very rare. This one was found by Aubrey McPhee, on lot 1, con. 6, North Orillia.

BONE COMBS.

In our report for 1903, pp. 80-86, the ground was taken that the Indian made combs before he ever saw, or had ever heard of a white man. In opposition to this view Dr. Beauchamp said, p. 86, "I do not believe any New York or Canadian Indian ever made a bone

comb until he had European hints. . . As soon as he had saws, teeth and ornaments multiplied."

The contention of Dr. Beauchamp is simply this, that without metallic tools it was impossible to make a comb, and the inference is that before the appearance of Europeans, the Indians had no use for any article of this kind.

In other parts of the world where archæological research has afforded evidence that the early peoples were in conditions, or stages of development similar to those that characterised primitive life in this country, that is to say in the stone period, combs were undoubtedly made, not of high quality it may be admitted, but possessing all that was required for the disentanglement of shaggy or matted locks.

Shortly after the appearance of our last report Prof. Petrie, the celebrated Egyptologist, was good enough to write as follows:

"UNIVERSITY COLLEGE, LONDON, W.C.

DEAR SIR,—On reading your interesting report of 1903, I can at once answer your debate as to the possibility of the bone combs, figs. 45 to 50, having been made without steel tools. They are very closely like the prehistoric Egyptian combs, made when copper was scarce and little worked, and no other working metal known; it is certain that flint must have been the tool material. I add some outlines for you to compare, only don't set off some wiseacres proving that the Amerinds came from Egypt, 6000 B. C.!

Yours sincerely,
WM. FLINDERS PETRIE.

Figures 44 to 46 are reproductions of Mr. Petrie's outlines, and one cannot help seeing the resemblance they bear to the shapes of

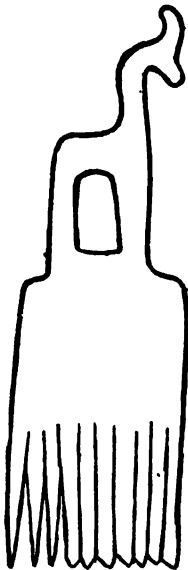


Fig. 44.



Fig. 45.

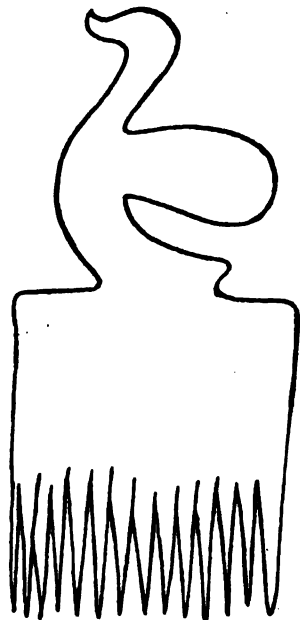


Fig. 46.

Canadian combs which we claim it was quite possible to make, and frequently were made, without the assistance of metal tools.

The impossibility of accepting Dr. Petrie's advice respecting the "wiseacres," is much to be regretted, for the old women to whom he refers will almost certainly come to some such conclusion as he deprecates, unless they either take his indirect warning to heart, or, what is more likely, ridicule the belief that there could be people in Egypt so long ago as six thousand years, B. C.!

Some of the other combs found in Ontario are here illustrated.

Figure 47, Laidlaw collection, is very rude in general form, but it is the only specimen of its kind having the teeth rounded, and otherwise well finished. It has been asserted that these bone combs were more for ornament than use, but this one at any rate does not support such a view. Ornamentally it would be useless, if for no other reason than that the teeth are not only so smooth, but so short, and the body of it is too long and heavy to be carried in the hair for decoration, while it is well adapted for use as a "redding comb."

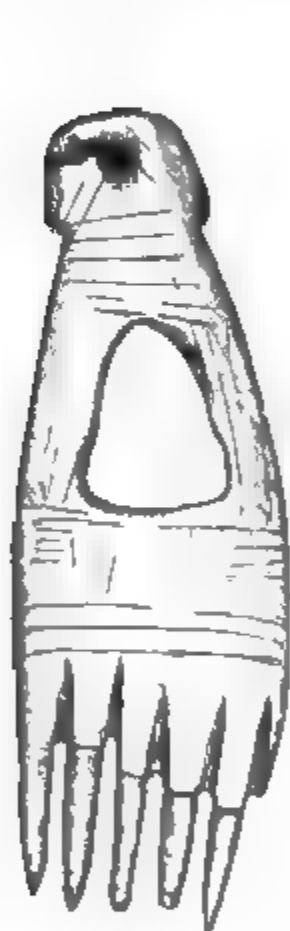


Fig. 47. $\frac{3}{4}$ dia.



Fig. 48. $\frac{3}{4}$ dia.

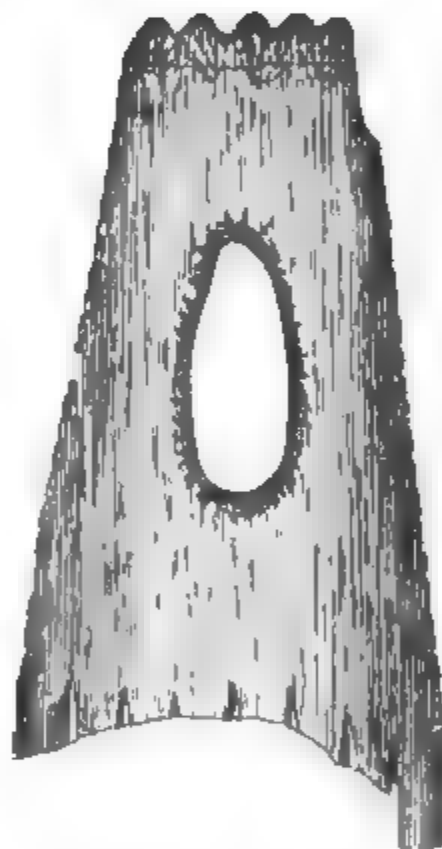


Fig. 49 (9.590). $\frac{3}{4}$ dia.

Figure 48 was found on the Walker farm, Brantford township, and was not associated with anything of European origin, although all that is left of the worked out pattern on one side has a somewhat un-Indian look. In this case, too, an attempt has been made to round the teeth, but not at all in the way shown by figure 47. The upper part is unfinished, and beyond the depression already referred to (which it may have been the intention to finish as a hole, like that in the preceding figure) there is nothing by way of decoration. What renders it probable that it was the maker's desire to form a hole here is that the work is done on the rough, or concave side of the bone. Some Indian mechanics, however, when about to make large openings did so partly by means of drilling a small hole at each corner of the intended aperture, and sometimes they even made a row of holes along the line of piece to be removed.

Figure 49, (9,590), is from the same locality as is the specimen last mentioned. Unfortunately the teeth have left little more than traces of their former presence, but the one of which most remains, shows that they have been well rounded and polished, clearly for combing purposes and not merely to be stuck in the hair, for in the latter case the comb would hold better if the teeth were left flat-sided, and otherwise rough. There has been a rude attempt at ornamentation by scalloping the upper end, by slightly notching the two edges, and the margin of the hole, and by four small triangularly scratched patterns at the head. On the other side, and just opposite these, there is a criss-cross arrangement, through which two roughly parallel lines run from edge to edge.

This is the only one of the six Canadian combs illustrated, which shows anything suggestive of file-marks, because of their regularity, but as these cross a hollow, at the deepest part of which they are quite as sharp as they are anywhere else, they must be otherwise accounted for.

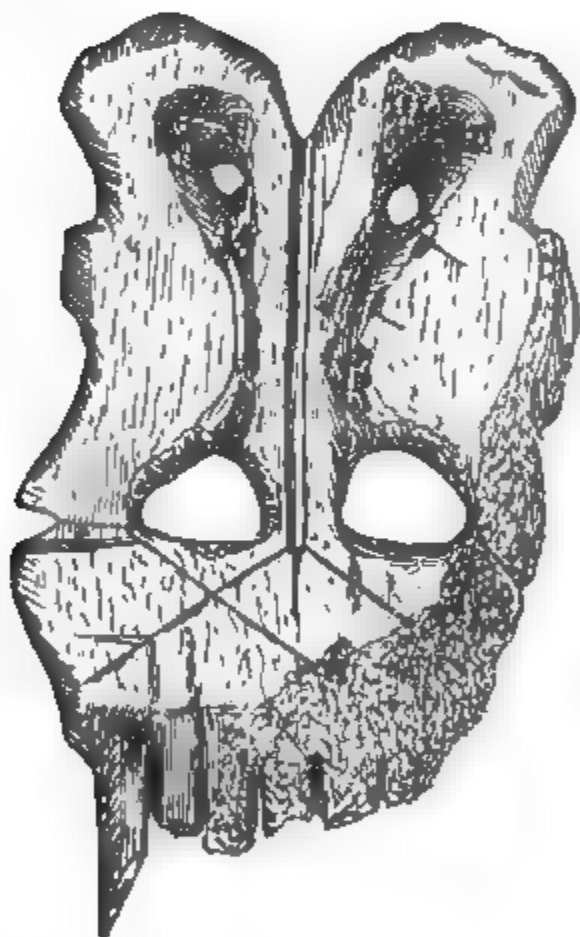


Fig. 50 (8,071) full size.

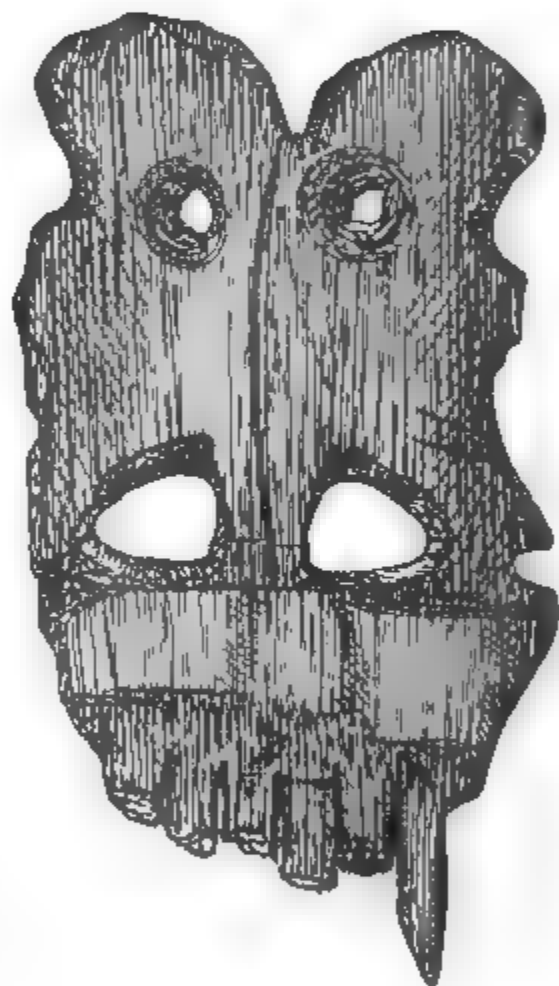


Fig. 51 (8,071) full size.

What is in most respects one of the most rudely-formed combs in the museum is illustrated by figures 50 and 51, (8,071). It was found in the Attawandaron country (Brant county) by Mr. F. W. Waugh. On this specimen there is not a single trace of work which could not have been done with flints. Even the two small holes at the top have not been bored, but have been made by scooping the material on each side, and that, mostly on what was the inside of the bone, as may be seen by figure 50. Neither the edges of the comb itself, nor those of the larger holes, show the least mark of attempt to smooth, or finish.

Figure 52, (23,379), shows the form of a somewhat elegantly shaped comb head, suggestive of European origin. All the curves

are graceful, the edges are well finished, the front portion is too slender to have been worked with stone tools, and all that is left of

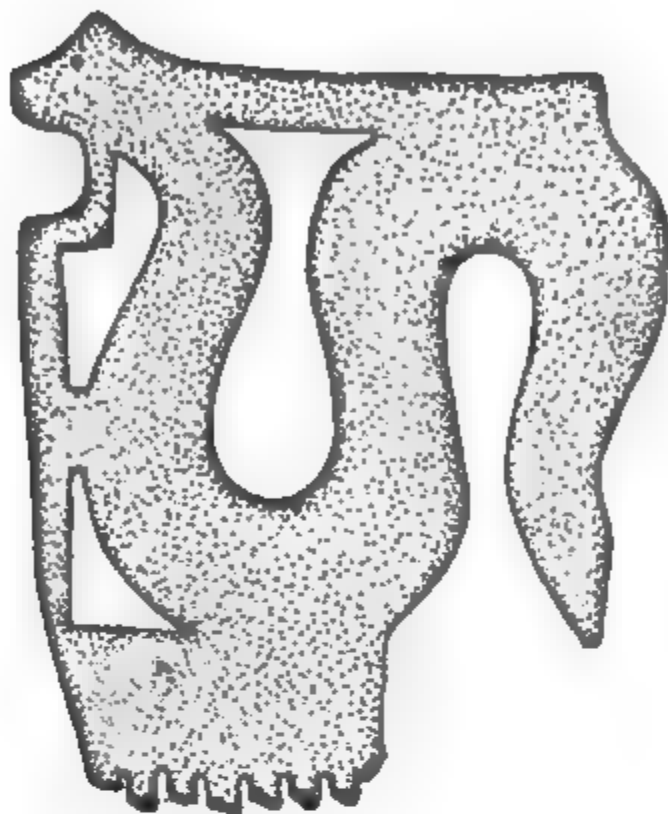


Fig. 52 (23,379) full size.

the teeth indicates the use of a metal saw. There is no attempt whatever at surface ornamentation.

The comb was found by Mr. Paul Taylor, at Taylor's Point, Sandwich, Essex county, and was associated with other objects, which, although of stone, were evidently indebted to "white" contact.*

ARE THE PERFORATED BONE NEEDLES PREHISTORIC?

BY W. J. WINTENBERG.

There are over sixty specimens of so-called bone needles* in the Provincial Museum. It is hard to say whether this was their real use, as their form suggests that they might also have been used as a sort of shuttle in weaving. Mr. Boyle, in his "Notes on Primitive Man in Ontario," (p. 73), in speaking of his figure 189, says: "It was almost certainly employed in the netting of snowshoes, and in the making of grass mats, for passing the binding string or thong of sinew- or root-fibre in and out among the stalks of grass as they hung suspended from a bar in front of the workers. It is therefore more like a shuttle, although it was not shot." As they are nearly all perforated at the middle they could more easily be grasped by the right or left hand as they were passed back and forth in and out among the fibres forming the warp.

These needles are from three to over five inches long. There is a very large specimen in the Oronhyatekha Historical Museum, Toronto, which is over ten inches long and about three-fourths of an

*See Ontario Archaeological Report for 1901, pp. 20, 21.

†Mr. Wintenberg here limits the name "needles" to specimens having "eyes". It is not unusual, however, to call what are otherwise known as "awls" or "perforators" by this name.

inch wide, and nearly three-fourths thick. It has a perforation near the middle. This specimen, owing to its size, could not have been used for any other purpose than weaving.

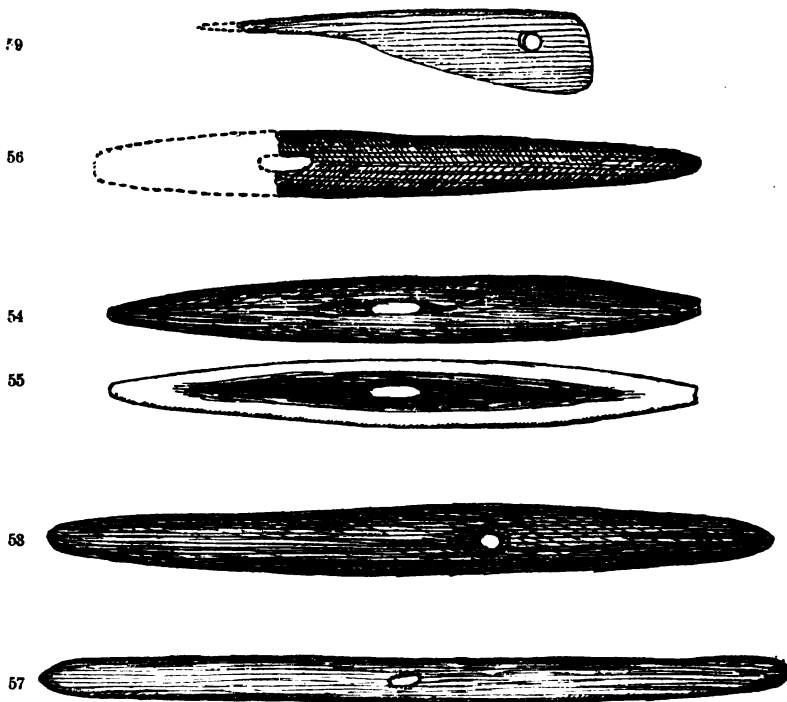


Fig. 53 (7,077) full size. Figs. 54, 55 (16,845), both sides, full size. Fig. 56 (25,045) full size. Fig. 57 (25,495) full size. Fig. 59 (25,191) full size.

Figures 53, (7,077), 54, 55, (16,845), 56, (25,045), and 57, (25,495), represent typical specimens in the Provincial Museum. Figures 53 is from York county; figure 55 has a long groove on one side and is from the same county; a specimen, triangular in cross section, shown in figure 56 is from Brant county; and figure 57 is from the Sealey farm near Brantford.

The holes in these needles are not all circular as in most other prehistoric artifacts. They are usually elliptical and, in some examples, pear-shaped. The former shape is the same as that in the steel needles of the present day, and we might safely assume that it was copied from a European prototype. There are even some needles that are grooved in the eye (figures 53 and 55 for example), but this may have resulted from the wearing of the thread.

Ontario is not the only region where they are found, for they are quite plentiful in the State of New York. Beauchamp's "Horn and Bone Implements of the New York Indians" gives figures of needles almost exactly like those found in Ontario, his figure 118 representing the Ontario examples more than any other. It is evident from this that they are confined to localities formerly occupied by the Iroquoian family of Indians.

There are two eyed needles in the museum here which are made of strips of sheet brass. One (figure 58) is from the Walker farm

in Brant county, the other (5,714), is imperfect, and comes from Nottawasaga township.



Fig. 58 (19,848) full size.

The specimens in the Provincial Museum come from Norfolk, Brant, York, Simcoe, Ontario and Victoria counties, where post-European relics, such as iron axes, brass kettles, glass beads, and other evidences of European contact are most abundant. Three of the needles figured by Dr. Beauchamp come from prehistoric sites, and one only from a site where post-European articles are met with. Of the five others figured by him he does not state the sites were prehistoric or not.

As far as we know no perforated needles have been discovered farther west than Brantford. We will take, for instance, the prehistoric village sites in the counties of Oxford and Waterloo, with which the writer is most familiar, and which are admittedly Atti-wandaron or Neutral; the same race as the former inhabitants of the Brantford district. But not a single bone needle has been found, nor are there any in the museum or in any private collection which came from sites in these two counties. Instead of these we find only plain bone awls, not perforated, and used in the same way as in the eyeless bodkin of the modern Kaffir. Figure 59 is a perforated specimen which comes from Hyde Park, London township. It is the only one in the museum which, although perforated, is not of the typical form.

Of course, although doubting that these needles were used by the Iroquois in prehistoric times, the writer would not say that they were incapable of inventing such a simple tool as an eyed needle. To do so would mean that they were utterly devoid of ingenuity or inventive ability. We may ask, however, why—if these needles are an Iroquoian invention—they are not found more generally both on their prehistoric and post-European village sites? But, as has been stated before, many are from sites where they have been found associated with European articles, and to be convinced one need only look at the relics of iron, brass, lead and glass which have been discovered on the Sealey and Walker farms (Brant county), where a large number of these needles come from. However, specimens have been found in other parts of the continent, which are prehistoric. Mr. Harlan I. Smith discovered them in shell heaps in British Columbia. He says: "Needles made of bone, both fine and coarse, were found in the graves, and scattered through the ground. Each of them was provided with an elliptical eye, with its major axis lying in the axis of the needle.*"

*Archæology of Lytton, British Columbia, Records of the Past, July, 1902.

In "Records of the Past," (Washington, D.C.), for March, 1904, Mr. Smith illustrated several needles (figures 20, 21 and 22, p. 85), which resemble the Iroquoian specimens very much; fig. 22 being almost like some in the Provincial Museum. Sir J. W. Dawson figures an ancient Hochelagan specimen in his "Fossil Men and their Modern Representatives," and others have been met with in the mounds of Ohio; but they all, except those found by Mr. Smith, differ from the Ontario and New York needles in having a circular eye through one of the ends and not through the middle. The Iroquoian specimens also are very thin, none of them being more than one-sixteenth of an inch thick, while the other examples are usually thick and more like the heavy bone awls.

[With all due respect to the opinions of Mr. Wintenberg, it seems utterly unreasonable to claim a European origin for eyed, bone needles, if this is what they were. As Mr. Wintenberg mentions, they have been referred to as shuttles, but we are not sure that even this supposition is correct. Mr. Wintenberg, speaking of the oval holes in these so-called needles says "we might safely assume that they were copied from a European prototype," but if he could find a European needle of the right date, say 16' or 17' anything, he would likely find a round, not an oval hole. It is inferred that the whole instrument or tool, or whatever it may be, is an imitation of *something* European, but what was the something. We might just as well claim a European origin for the idea of our stone gouges because they are hollow, or for anything else, because it may happen to be sharp, or blunt, or straight, or crooked, or round, or square, many things so characterized having been known to exist in Europe at one time! However, Mr. Wintenberg is a close and intelligent observer, and his remarks are worthy of consideration. D.B.]

PENDANTS.

The forms of what we called pendants varied greatly, and were probably made to adapt themselves to the natural shapes of water-worn stones, or to the adventitious direction of a fracture when the material had to be split, or otherwise broken. In not a few cases pebbles in which a hole was worn were chosen, and used without a particle of workmanship.

For some unknown reason many of us exhibit a desire to pick up pebbles so marked, and examples of the kind are often carried as "pocket pieces." Sometimes such stones are so artificial in appearance that it is difficult to believe in their purely natural production.

Mr. Matthew Teefy, the doyen postmaster of Richmond Hill, found on Toronto Island, fifty years or more ago, a specimen closely resembling a finger-ring, in size as well as in appearance, and he has carried it during all these years as a watch pendant.

Stone worship in past ages was, in many cases, identified with boulders or other rock specimens through which, by natural means,

a perforation had been made, but why was it supposed that fetishness, or sacredness was inherent in stones on this account? Was it yoni?

Figure 60 (7,496), is another example of the adaptiveness in question. The adventitious shape of an argillite pebble has suggested a pendant of some sort—it may have been an eardrop—a little

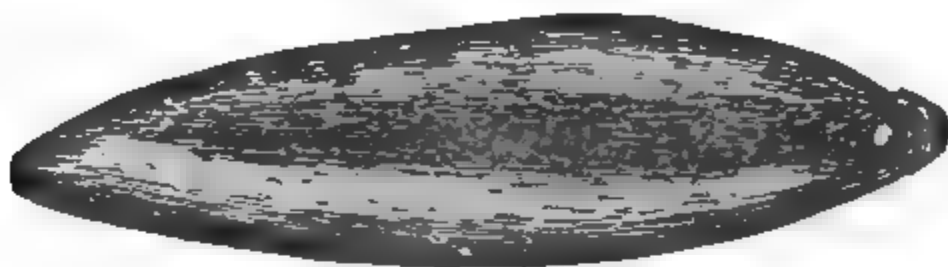


Fig. 60 (7,496) full size.

smoothing has been done, a hole bored, and here is the result. The specimen was found by Mr. M. Brown, on the shore of Lake Rideau, and came to us through Dr. T. W. Beeman.



Fig. 61, (20,133). Fig. 62, (24,413). Fig. 63, (25,149). Fig. 64, (24,500). Fig. 65, (10,745) $\frac{1}{4}$ dia.

Other examples are illustrated by figures 61 to 67 in some of which the naturally worn hole has been improved a little, but in the others there does not appear to have been any work put on the stone at all, even so far as the shape of the pebble itself is concerned. All these pendants are flat—slaty. Such “adderstones” are found on village sites in almost every part of the province.

Figure 66, (26,184), shows both sides of a similar pebble on which some decorative attempts have been made, although much less distinctly than the engraving would indicate. Indeed, without the aid of a magnifying glass the pattern is barely traceable. The seven notches on the lower edge may be ornamental in intention, or they

* In Scotland, and probably elsewhere in Europe, naturally perforated stones were known as *adderstones*, the belief being that the holes were produced by the stings of adders. Some young folk may not know that serpents or snakes never sting—they only bite. What is called the sting is the creature's tongue. The adder is a small snake, seldom more than two feet long.

In Leyden's (?) *Cout of Keeldar*—a ballad—the sixth verse reads:

“No danger he fears, for a charmed sword he wears;
Of adderstone the hilt;
No Tynedale knight had ever such might,
But his heart-blood was spilt.”

And in verse 54 we have:

“In Keeldar's plume the holly green,
And rowan leaves not on:
And vain Lord Soules' sword was seen
Though the hilt was adderstone.”

may have been meant for a record. This somewhat interesting little specimen was found on lot 8, Beasley's new survey, Blenheim, Oxford county, by Mr. H. Z. Smith, of New Hamburg.

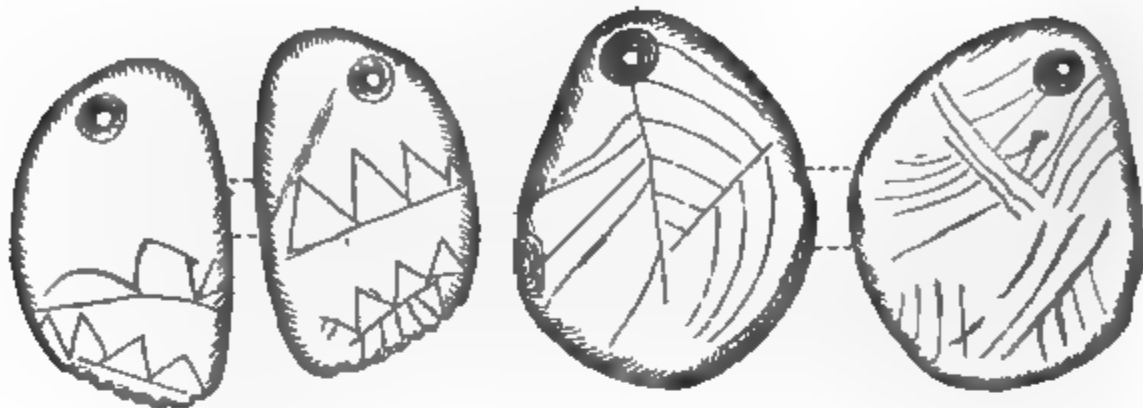


Fig. 66 (26,184).

Fig. 67 (20,130).

A better marked example of this kind is from the Sealey farm, Brant county, where Mr. W. Dick picked up the pendant shown by figure 67, (20,130). It is of a dirty brown, somewhat resembling catlinite. The lines are very much confused.



Fig. 68, (26,245) full size.

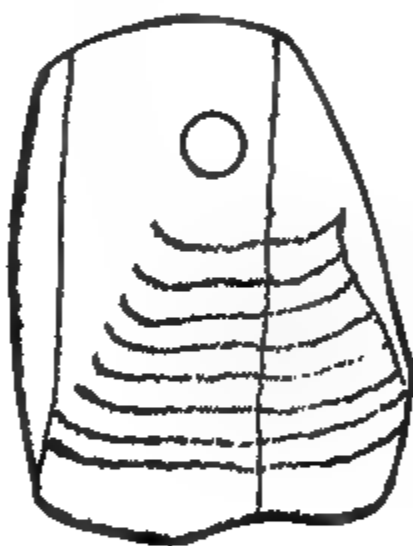


Fig. 69, (24,394)

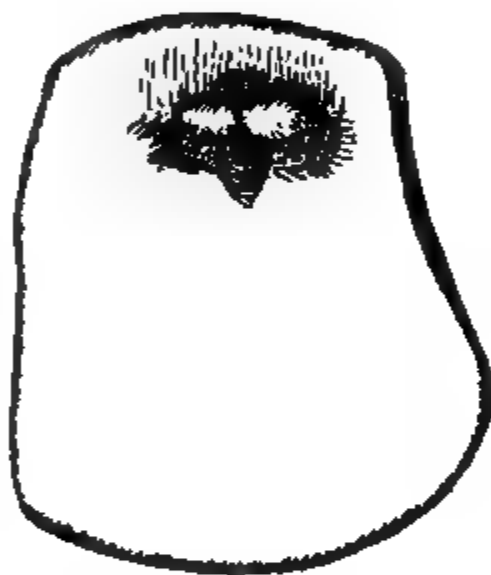


Fig. 70, (25,518) full size.

In figure 68, (26,245), we have a diagram of a very small animal form, probably a turtle, made from a piece of brown slate such as was used largely among the Tobaccos in bead-making.

It was found by Mr. Fred. Storry on lot 12, concession 7, Notawasaga.

In working out the details, the man who carved this little specimen was at pains even to form a mouth on the sixteenth of an inch thick material.

TURTLE SHELL PENDANT.

We seldom find anything made from "turtle shell" among aboriginal products, not including, of course, the dance-rattles. Archæologically we do not find the rattles, unless very rarely. In the museum there is but one specimen of this kind taken from a grave on lot 34, concession 7, Beverly, formerly the farm of Mr. James Dwyer.

Figure 69, (24,394), represents another exception in the form of a bangle or pendant, probably from part of the carapace of *Chrysemis picta*. It was found on the Colemar village site in Blenheim township by Mr. W. J. Wintemberg.

SHELL OBJECTS.

When the Ontario aborigines wanted to make anything in shell they had to go far afield for their raw material—nothing indigenous of this kind was worth the trouble of an hour's work.

Of the common unios and some small univalves some trifling use was made, but nothing requiring the exercise of much mechanical dexterity to shape. Concha, heavy and strong, were brought many miles from what is now Florida, perhaps in exchange for furs, striped slate, and copper, but in any event they must have been a precious commodity when they reached this latitude.

Figure 70, (25,518), is an odd piece of shell work, very likely a neck pendant, or an ear drop, near one end of which an eye has been worked through a thick part of the shell in a way that is unique in this country, as may be seen from the diagram. The opposite side is perfectly smooth but for a few slight, half aimless looking scratches that were probably meant for a design.

The axe-like outline of the specimen is purely accidental—the result of fracture—the edges are not polished.

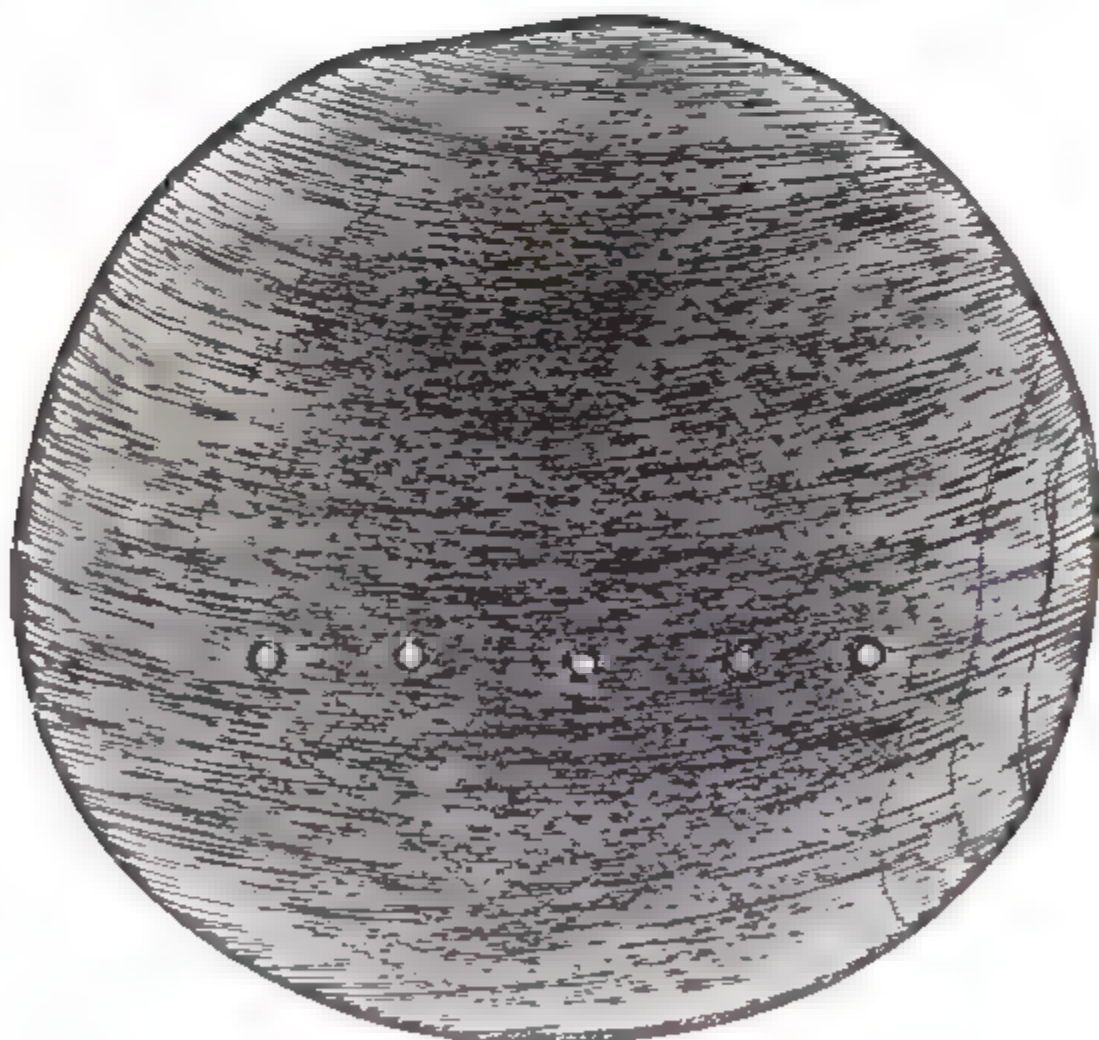


Fig. 71, (25,536) $\frac{3}{4}$ dia.

Not the largest, but one of the largest worked shell specimens in the museum is the gorget shown by the picture at figure 71, (25,536). It is apparently made from the body-whorl of the busycon, and from what has been a very large specimen of that shell, for while the diameters of this piece are 5 1-8 and 5 3-8 inches, the depth of the concavity is less than an inch.

Beyond bringing the gorget into shape, smoothing the edges, and boring five holes in a row through it, no other work has been done, no carving, not even a line or mark of any kind for ornamental purposes.

Fully four-fifths of the convex side are coated with a what looks like iron rust.

Both of these objects were found on the Sealey farm, Brant county, Ont.

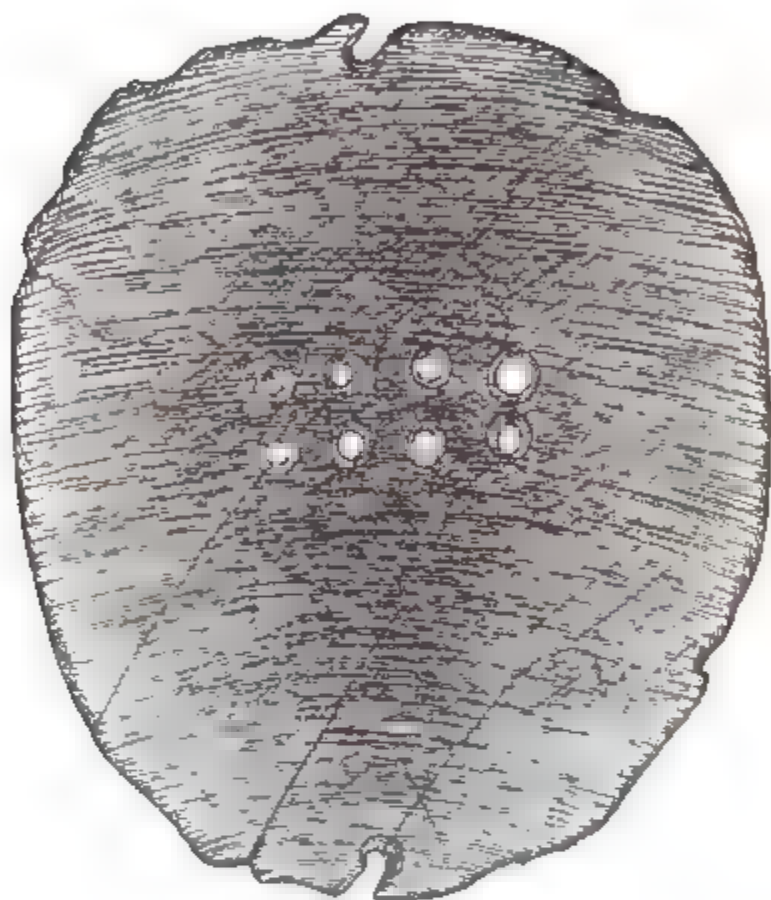


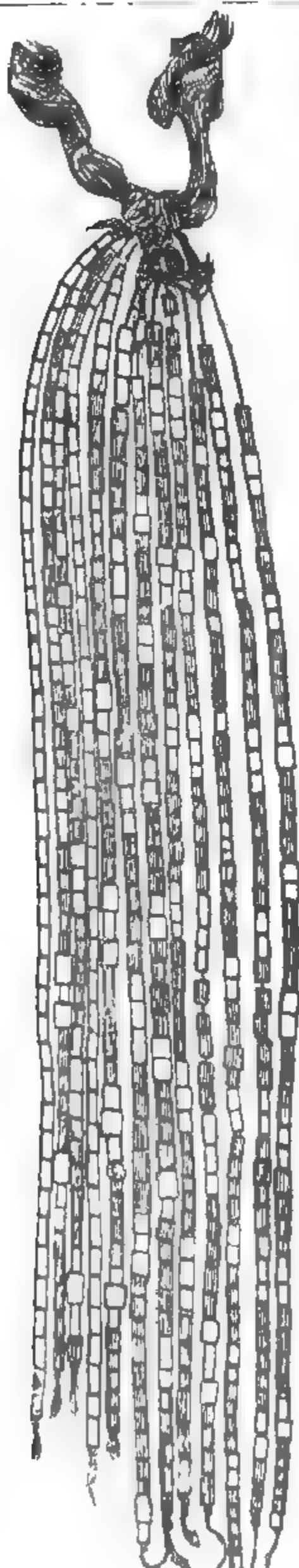
Fig. 72, (25,470) $\frac{1}{2}$ dia.

Another shell "gorget" found by Mr. Dick on the Sealey place is shown here, figure 72, (25,470). It was in two pieces when collected with the rest of the material from the graves he opened, but it has been put together neatly, and, for two lost portions, plaster of paris has been substituted. This gorget is remarkable in having eight holes near the middle—something quite unusual. It has also had two holes bored near the margin at the extremities of the longer axis. As with all other Canadian shell specimens there is not a vestige of carving on the concave surface.

WAMPUM STRINGS.

The uses of beads were as various as were as their shapes, and the kinds of material of which they were made. Perhaps the original purpose was a mnemonic one. The carrying of records on the person would suggest the decorative use, followed by their employment as pledges in bargain-making, and, lastly, as a medium of exchange.

For a long time the natives of this country preferred "shell money" to European coinage, and the white man soon produced wampum, or wampumpeage, with the aid of simple machinery, in such quantities that the value decreased rapidly.



The accompanying illustration shows twelve strings of white-man-make wampum, each string being a foot in length, and consisting of small cylindrical beads, some white and some purple, made from a bivalve (a mussel) specimens of which are found on the Atlantic coast, having portions, or even the whole, of the interior, a dark purple.

String combinations of this kind were not at all uncommon, according to a statement made to me by the late Ska-ná-wa-ti, who was for so many years the Six Nation Firekeeper, according to whom, also, for this method preceded that of forming the beads into belts, by uniting the strings.

As long as the beads were loosely strung the records must have been purely arbitrary as to arrangement, and, therefore, quite unintelligible to any but the Firekeeper and those who were instructed by him. In belt form, however, there was room to advance a few steps, for by this method something was possible by way of making simple designs, which, although also legible only to the initiated, came nearer to the pictographic devices used in making records.

The loose string system, then, was on a par with the Peruvian *quipa*, or knotted string contrivance.

Figure 73, (27,008), represents a gift made to the museum by Mr. F. Lamorandiere, Indian interpreter at Cape Croker, through Mr. H. G. Tucker, barrister, of Owen Sound.

Mr. Lamorandiere writes that "about 1816 when the voyageurs and adventurers from Lower Canada began to be attracted to the upper country (*les Pays d' en haut*) to engage in the fur trade with the Indians, one M. Piché took himself to Sauging, (*Saugeen*). About 1818 Piché married a woman of the Chippewas (*Ojibwas*) of Sauging. They had no family, and when he died his widow was taken care of by Mrs. Augustine Gonneville, (more frequently called *Grandeville*), who was the daughter of Joseph Lange and a Cree woman. She married Gonneville, or *Grandeville* in the Red River country, and the two removed to Goderich, and Sauging. Mrs. *Grandeville* cared for her till she (Mrs. Piché) died. Mrs. Piché ingratitude for all the care bestowed on her, presented Mrs. *Grandeville* with these strings of wampum, saying that they would entitle Mrs. *Grandeville* to her (Mrs. Piché's) portion of land in the Sauging country. Augustine *Grandeville* died after raising a very large family, and his youngest daughter got married to Francis Benoit, who died near Sarnia. Mrs. Benoit took charge of her mother until she (Mrs. *Grandeville*) died, having bequeathed to Mrs. Benoit the strings of beads, repeating the words of Mrs. Piché, that the wampum would entitle her to one share of land in Sauging territory.

"Mrs. Benoit became Mrs. F. Rocher de Lamorandiere.

"The land claim was never acted on, as there was no need of doing so, because land was then cheap.

"It may be well to remark, however, that the gift of these beads from one tribe to another, or an individual to another, was regarded as very solemn and binding, and a compact made that way was never broken.

"Having no use for the beads except in remembrance of my late wife, and as a memento of the old times, I freely donate them to the Department of Education to be placed in the Provincial Museum, or any other place, as the Curator may think fit.

F. LAMORANDIERE."

Mr. Lamorandiere's notes are quoted pretty fully, because they present an interesting little picture of life in Upper Canada about the beginning of last century, illustrating, to some extent, the relation that existed between the traders and the Indians, as well as showing us that the aboriginal custom of confirming a promise with some tangible pledge was yet in force.

We are greatly indebted to Mr. Lamorandiere for his gift of such a well attested "document," and to Mr. Tucker, for his kindly offices in procuring the wampum for the Provincial Museum.

BIRD AMULET.

It has more than once been pointed out in our reports that by far the greatest number of the "bird amulets" found in Ontario

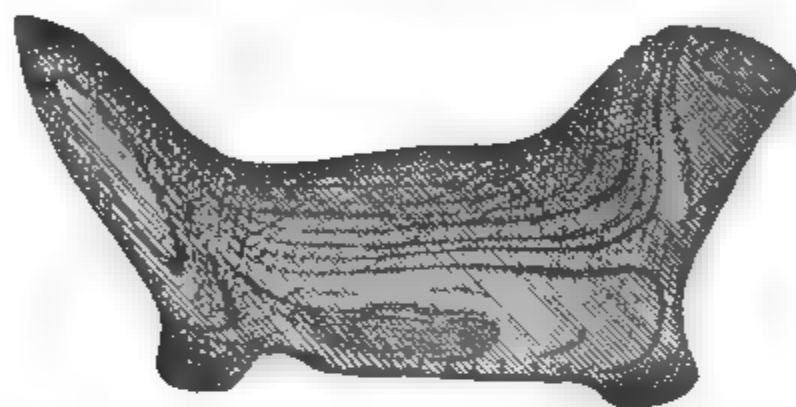


Fig. 74, (27,001) full size.

come from the peninsula lying west and south of a line drawn from Kingston to Goderich or Kincardine. What is the most easterly example is represented by figure 74, (27,001), which has recently come to us from Drummond township, Lanark county, in the valley of the Rideau. The head of this specimen is missing, but in every other respect the "amulet" is complete. It is made of the standard material, Huronian or striped slate, and was probably carried from the west to where it was found. It may do no harm to repeat that no object of this kind has been found in Ontario associated with human remains, all have been taken from the surface, or were exposed by the plough, so that even in the latter event they were lying at no great depth. Since the issue of last report, we have received casts of two very fine specimens picked up in Manvers township, Durham county, forty years ago. For these we are indebted to Mr. J. G. D'Olier, now of Rochester, N.Y.

The specimen figured was found by Dr. T. W. Beeman.

COPPER.

The appearance of the copper tool shown here (fig. 75) is strikingly European—perhaps because it reminds one so much of the blade of a spokeshave. It is safe to assume that the tangs were for some sort of handle attachment, and perhaps the implement was used as a currier's blade is, or, like what is known as the woman's knife, or Eskimo knife. This peculiar specimen was found eight feet deep in an excavation made for the Trent Canal, where it crosses the Portage road, in Eldon township, Victoria county. In such cases, however, little or no value can be attached to depths. What was lying on or

near the surface only a minute ago may be found feet, or fathoms below, as the result of a little loosening of the earth where an object



Fig. 75, (18,227) full siz..

lay; but when the finder take this specimen from undisturbed soil, no matter at what depth, the case is very different. In this instance the conditions, if not uncertain, were not mentioned.

The tool is considerably weathered, especially the tang portions, showing the peculiar fibre-ridges so often found on long-exposed, cold-hammered, copper articles.

Figure 75, (18,227), was found by Mr. Alexander Miles, and forms part of the collection presented by Mr. George E. Laidlaw.



Fig. 76, (3,705) full size.

What one may suppose to be another tool of the same kind is shown by figure 76 (3,705), taken from the bed of the Rideau near Oliver's Ferry at low water, by Dr. T. W. Beeman.

POTTERY.

The pieces of pottery here illustrated, figures 77 and 78, (25,439) and (25,457), were taken by Mr. Walter M. Dick from a grave on the Walker farm near Brantford, a locality that has yielded considerable quantities of relics, although hitherto no whole specimens of clay vessels have been found. Both vessels are in the main, of the usual type, differing only in being perfectly plain with the exception of the shallow cremation along the edge of figure 78, and some slight incised markings on 77.

When native-made pottery is present, whether whole or in fragments, on rock ledges or in recesses, in graves or on village sites, it points almost certainly to a time anterior to the Indians' com-



Fig. 77 (25.439) half dia.

munication with white men, because one of the first results of trade contact was the substitution of brass kettles or pots for the poorly burned, more easily broken, and much less portable clay vessels.

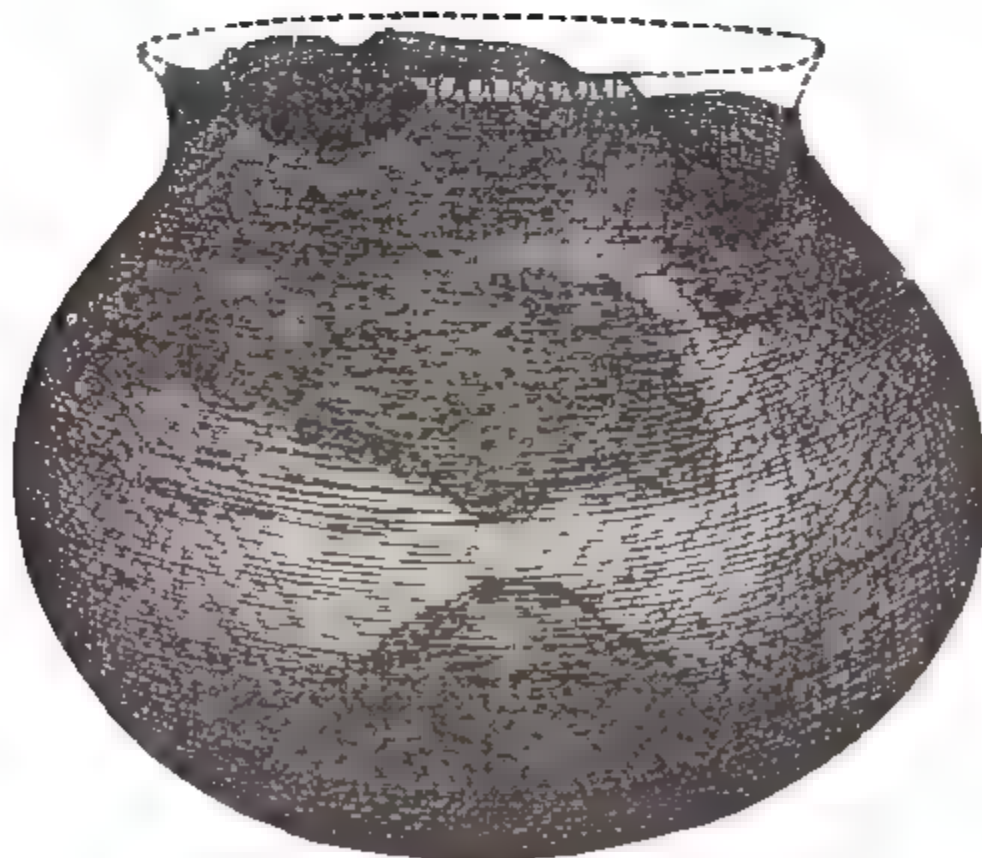


Fig. 78 (25.457) half dia.

It has been possible to remove comparatively few dishes of this kind from graves in anything like a whole state. Even when

it would appear as if most of the fragments of a vessel were lying before one, it is seldom, indeed, that success attends attempts to form a complete pot.

Some of the best specimens in the Provincial Museum were found in cliff recesses, and in an inverted position. It has been thought that they were thus placed as traps for squirrels and other small animals, just as we ourselves sometimes use bowls to catch rats and mice, but it is far more likely that they were left in this way for the sake of stability, and, perhaps, to prevent water from finding its way inside, and thus rendering them liable to certain breakage from frost, for the probability is that clay pots were most frequently so stored, during winter marches.

The comparatively perfect vessel of which figure 77 is a diagram, was the only artificial relic found in a grave four feet deep, and containing nine skeletons. A pine stump eighteen inches in diameter stood on the top of the grave.

This pot is five inches deep, and a little more than six inches in diameter.

Reference to the list of additions to the museum will show that we were presented by Mrs. J. W. Scatcherd, and her sister, the late Mrs. J. W. Wallace, of Flagstaff, Arizona, with a number of clay pots and other objects connected with old-time and recent Indian life in the south-west.



Fig. 79 (26,873) 2-5 dia.

Figure 79, (26,873), shows what one of these looks like. It and another are of Moqui make (recent) and were procured directly from the Indians, by Mrs. Scatcherd. Vessels of this kind burn to a creamy white, or light yellow, and afford excellent ground for the painting of designs in black, various shades of brown, and dingy red.

While the shapes of Arizona and New Mexican earthenware resembled, in many cases, the ancient patterns, the style of decoration has become very much mixed, as may be seen by this illustration.

Here we have what is meant to represent a bird in each of the four panels that occupy the exterior surface of this olla. The absurd, or, by courtesy, the somewhat conventionalized form of the

picture, more especially that portion of it which represents the wings and tail, renders it difficult of recognition, but there can be no doubt as to the decorator's intention.*

Some of the other pots presented by Mrs. Scatcherd and Mrs. Wallace have been ornamented by more skilful draughtsmen, or draughtswomen, rather, but this example best illustrates the overlapping, or mingling of the new and old in native art.

As the Indians of Arizona and New Mexico find a ready market for all the vessels of this kind they can make, and are thus enabled to add considerably to their comforts, it is to be regretted that efforts like those of Mr. L. O. Armstrong among the Algoma Ojibwas, have not proven more successful, for there can be little doubt that a complete revival of the pottery industry on many of our reserves would prove profitable.

If any further attempts be made to bring about such a result, the Indian women should be instructed to follow closely and honestly all the primitive methods.†



Fig. 80 (3,152) half dia.

*In the 22nd Annual Report of the Bureau of American Ethnology, part I., just issued, Mr. J. W. Fewkes says at p. 146, in a long and admirable paper on Pueblo pottery: "Figures of birds predominate in the pictography of all the ancient Pueblo ruins which have been studied. In their delineations of bird figures, however, the artists took strange liberties with nature, representing birds unknown to students of ornithology."

Plant forms never appear on the ancient pottery.

†"The aboriginal potter's art was one of the first to fall into disuse after the arrival of Europeans," and we accordingly find few, if any, evidences of attempts to make clay vessels since the Indians became possible possessors, first of copper, and more recently of iron-ware. There is, perhaps, not a single Indian in Canada, and few on the continent, capable of making a clay pot by the strictly old methods. Mr. L. O. Armstrong, Colonization Agent of the Canadian Pacific Railway tried to re-introduce the art among the Ojibwas, on one of the Algoma reserves a few years ago, but the results were not at all encouraging, if we may judge from two specimens that Mr. Armstrong was good enough to place in the museum, even should ample allowance be made for the statement that many other examples were of a much better quality. It is only in certain localities in the south-west of the United States, e. g., reserves in Arizona and New Mexico, that we find the ancient art maintained with any measure of success.

The United States Government has effected numerous tribal deportations of eastern peoples to western reserves, and among one of these settled in Arizona was an old woman (a Cherokee?) who claimed, or was credited with, the ability to produce pottery after the old eastern methods of working.

A gentleman having prevailed upon her to make six specimens for him, to correspond as nearly as possible with Atlantic slope types, presented one of the reproductions to Dr. S. H. Collins, of Lawrenceburg, Ind., and Dr. Collins was generous enough to give it to us; figure 80.

A close examination of this very well made vessel incites a little enquiry.

Perhaps what will first catch the eye is the flat bottom. As far as is known to me no example of eastern states, or of St. Lawrence valley pottery has been found otherwise than round bottomed. Very likely the old woman found it convenient to use a board, or a flat stone on which to mould her clay, but the making of the bottom flat is an evident oversight—one, too, which implies ignorance, or forgetfulness on her part, respecting the advantages possessed by a round bottom over a flat one.

In shape we have nothing to correspond with it in the museum from any part of America. Its resemblance to prehistoric European ware is much closer than to anything commonly found on this continent.

Again, the color is black, inside as well as outside, and the surface takes a fairly good polish. In these respects the piece looks like vessels from Santa Fé and Santa Clara, New Mexico, and the question is brought up whether the maker merely imitated the Santa Fé finish, or reproduced what she knew to be the method of finishing such vessels in the east, for we must bear in mind that usage, lapse of time, and exposure to the elements, or contact with the earth would effectually remove any superficial treatment of this kind, thus accounting for the utter absence of color on such specimens as now fall into our hands in this part of the continent.

It is mainly in the incised design that we can trace eastern relationship, as the pattern is one of the commonest on our pottery, while incised designs of any kind are comparatively rare on Arizonan earthenware.

Without being able to examine a fracture it is impossible to know how the clay was tempered.

The vessel referred to is fully eight inches in diameter, and is four and a half inches deep.

PICTURE WRITING.

Between sign language and picture language there seems to be a fairly easy and almost natural step whichever way it may have been taken. It is probable that in the evolution of alphabetical characters, every written language has gone through both stages. Within the present area of Canada and the United States picture writing was the highest condition of development reached by the natives, but even so, the art never attained a very high state.

At best, such a method of expression must always be more or less arbitrary, even when conventionalized forms have become fixed.

We may feel quite sure, for example, that certain lines, or combination of lines indicate rain, water, lightning, buffaloes, and so on, but beyond this we cannot go without direction or instruction from some one who possesses a knowledge of the story either at first hand, as the writer, or, traditionally.

The most highly conventionalized characters in Ontario appear on precipitous rock-faces, and are usually found on lake and river margins. A few samples of such work have been found on bits of much decayed birch-bark, and, so far as known, Ontario has no examples of pictographs on skins, by its "old people." Among prairie tribes, however, this seems to have been a favorite device for recording events of importance, if we may judge from the observations of Catlin, Schoolcraft and other early travellers, but even on their auth-

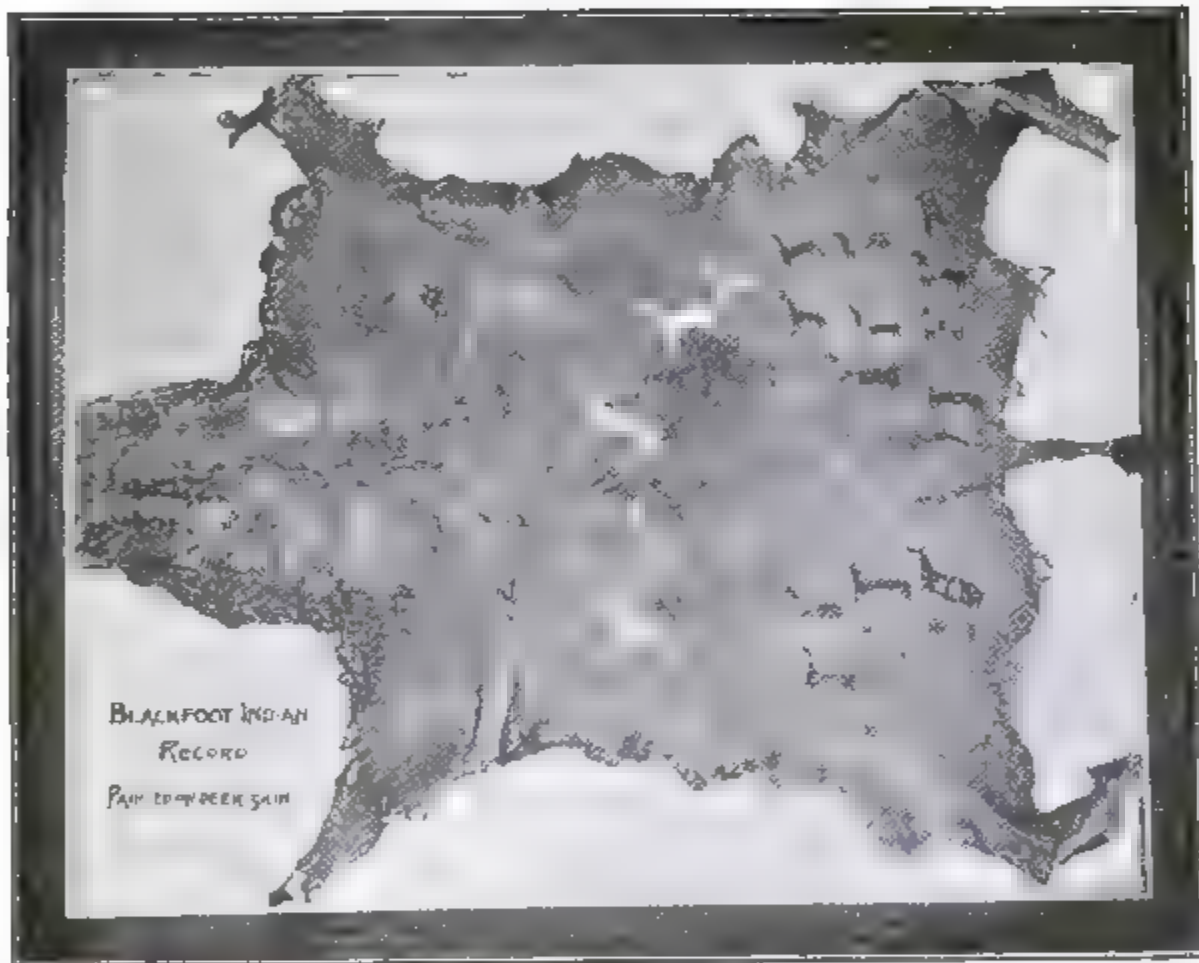


Fig 81.

ority we are not quite sure how far back the practice extended. What was seen by the pioneer explorers may not have dated beyond the earliest white-man days, although it is easy to concede the likelihood of long previous use when we know how marvellously adept the plains Indians were in the use of sign language, not by means of limb movements only, but by light-flashes from pieces of mica.

Among the Sioux there were kept "winter counts," or calendars, by means of pictures arranged spirally, on buffalo skins, and sometimes covering periods of from fifty to a hundred years. In accordance with this method, the count was kept by designating each winter as this or that, referring to some important event of the season.

The Blackfoot record on deer skin, of which a good copy is shown at figure 81, seems to be connected with some hostile engagement.

The presence of horses, and of muskets, is enough to show us that the record relates to a date subsequent to the arrival of the white man, while the fact that some of the fighters are armed with bows and arrows points to a comparatively early day in the history of race-contact, a time too early for all the Indians to have secured firearms.

The two horses shown in outline are drawn in pale red; those in white are colored yellow, while the dark ones are partly brown and partly red.

This interesting document was procured on the reserve of the Blackfoots in Alberta, by the late, and eminently venerable, Mrs. Sarah A. Curzon, and came to us through her respected and highly accomplished daughter, Miss Edith M. Curzon, who was drowned, nearly two years ago, in Go-Home Bay.

Neither of these ladies knew the meaning of the story depicted on the deer skin, so that when Miss Curzon was spending her vacation in the Northwest during the summer of 1902, it was arranged that if we would supply her with a photograph of the pictograph she would endeavor to procure its interpretation from some of the Blackfoots, among whom her sister and brother-in-law resided—the latter as Indian agent.

After Miss Curzon reached her destination she wrote the following letter regarding her unsuccessful attempts to unravel the picture-story. Although most of the letter deals with other Indian matters, it is interesting enough, ethnologically, to be given here in full.

GLEICHEN, ALTA, 16th June, 1902.

MY DEAR MR. BOYLE:

I was so rushed in leaving town that I could not see you to thank you for the photograph. My sister and my brother-in-law say there is not much chance of getting the interpretation, because as a rule the pictures are largely the result of imagination rather than for depicting the real history of anyone, or of anything. It is the same in the dances, the men get up and say what they would do under such and such circumstances, and then, finally say they *have done* these things; a state of affairs not unknown among white people of boastful tendencies.

We drove over the prairie a short distance to see a dance given by one of the Indians,—just a common dance.

About ten waggons were drawn into a circle, and at one side a number of old pieces of canvas and blankets and quilts spread up to make a shelter from the sun. At one side within the circle four young men were seated, two and two, on waggon seats beating a skin drum suspended from sticks. They chanted in a loud, quavering, falsetto voice, a monotonous dirge, while the dancers sat on the ground or on waggon seats around the circle. Every now and then, one man would get up and begin dancing, and others followed. The dance consisted in balancing, first on one foot during two beats, then on the other, the dancers sometimes simply standing in one place, others going around in a small space, some perhaps, following, or choosing their own path in the circle. None of the dances lasted longer than three minutes, and some of them only about one. Most of the performers were fantastically dressed, and all were painted. One had nothing on above his waist except paint; some had strings of sleigh bells around their waists and legs, and turkey-feather ornaments were quite popular. One man wore trousers of blue figured blanket: and fastened to his belt, both front and back, a huge disk set around with feathers, which necessitated his sitting on a wagon seat instead of the ground in order to preserve them unbroken. Several of them wore cockatoo-sort of affairs on the heads, which they get from the Crows, a tribe across the border. My brother-in-law has one which he is giving me, to take back. Old Crowfoot's grave is a short distance away from here, and his daughter-in-law does my sister's rough house-work. She is married to one of his sons, who is blind. She says she did not want to marry him at first, but Crowfoot offered her mother a good many horses, etc., and she concluded that some of the other men might be much worse, so she married him. She has a ne'er-do-weel

son, Jack, about twenty, and a pretty little rag-a-muffin, about five years old, called Joe in English, and Akeenam, in Blackfoot. We are within sight of a "dead tent," a tepee built on a hill, over a young man who died a few weeks ago. There has been great mortality among the Indians owing to measles, but it has passed away now.

I am very sorry that I have not a camera with me, as there are many characteristic pictures I could take of their mode of life

With kind regards,

Yours very sincerely,

EDITH M. CURSON.

In connection with the statement that "as a rule the pictures [of this kind] are largely the result of imagination rather than for depicting the history of anything," it may be added that this view is not accepted by the Rev. Dr. John Maclean (now editor of *The Wesleyan*, Halifax) who spent several years as a missionary among the Blackfoots. Dr. Maclean thinks it is yet possible to discover the story told by the pictograph on figure 81.

PORCUPINE QUILL WORK.

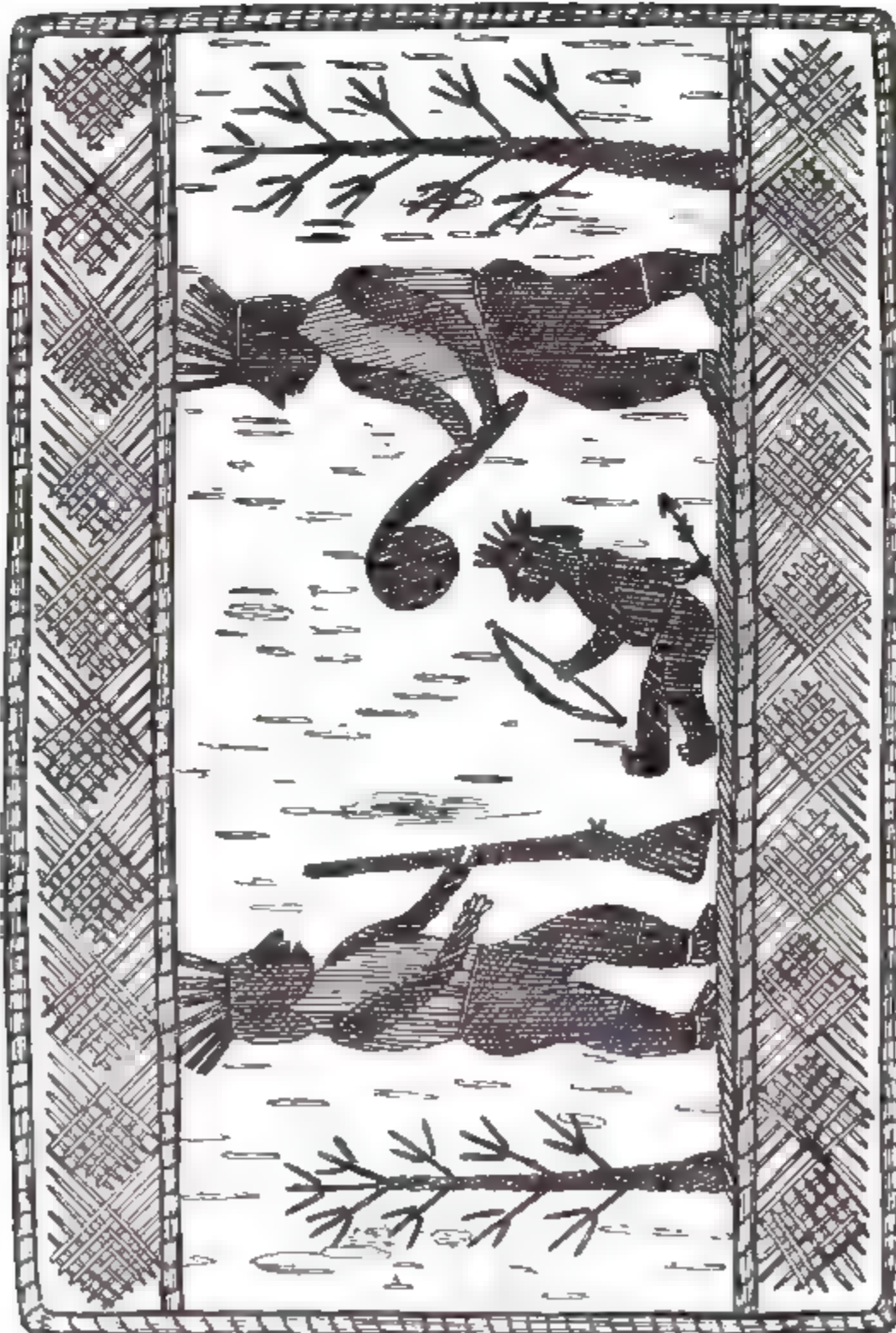


Fig. 82 (26,988) half dia.

Until within the last few years there is said to have been on Quarry Point, Lake Couchiching, the northern extension of Lake Simcoe, a rock, on which were some Indian paintings. Mr. J. Hugh Hammond, barrister, of Orillia, who takes much interest in all things connected with the Rama Reserve people, of whom he is the trusted adviser, has kindly procured for the museum what purports to be a copy in quill-work of the rock paintings referred to. The work was done by Mesaquab (Jonathan Yorke), a Mississauga, on the Rama Reserve, which includes Quarry Point, but as he was entirely dependent on his memory, and it is some years since the rock fell into the water, considerable allowance must be made for the accuracy of his performance.

The design is said to represent two Ojibwa warriors after the last great battle fought with the Iroquois, the central figure being a Mohawk, or Canienga. Mesaquab asserts that the Ojibwas, coming from the north, occupied the territory forsaken by their enemies, and that his band of the Mississaugas chose the site and vicinity of the present town of Orillia—the Huron, Cahiague.

Reverting to the illustration, it may be mentioned that the museum was desirous of procuring a specimen of undyed, quill work, as free as possible from any appearance of European influence, and that Mesaquab chose this as the design for the lid of a birch-bark box he was asked to make with the above object in view. The box is $9\frac{1}{2} \times 6 \times 2\text{--}3\text{--}4$ inches.

Perhaps it should be pointed out that the borders of the illustration did not appear on the rock painting.

HUSK FALSE FACES.

During the numerous feasts held by the Iroquois Pagans on the Six Nation Reserve, in Brant county, certain dances are performed in which those who take part are disguised by means of false faces, made of corn husks, somewhat ingeniously put together.*

The mode of making is ingenious. A single coil of three-plait, coarse strands forms the edge of the rim or frame, part of each central, or upper strand of which is frayed to form a fringe all round. Above this is a five or six coil band of much finer plait-work to cover the brow and chin, and back portion of the cheeks. This leaves a space to be filled mainly by the eyes and mouth, with room for the nose. Each eye-piece is formed of five coils of still finer strands, leaving a hole an inch or so in diameter. The mouth-piece is made similarly of twelve five-plait strands, but the coil is worked more conically, terminating in a hole only about three-eighths of an inch in diameter. After the eye and mouth-pieces have been attached, the intervening spaces on the face are filled up with short plaited material of the same kind. The nose is made separately, and con-

*"Seven boys in husk masks * * * enter.

"Head man speaks, and while he does so the dancers are performing antics among the people on the floor—shaking rattles and making subdued sounds with their mouths. * * *

"When the Head man ceases to speak the masked boys give the Husking Dance." *Archæological Report, Ontario, 1898, p. 87.*

An old Indian on the reserve informed me during the winter of 1898, that masks of this kind were of much earlier origin, than were those of wood.

sists of a small bunch of husk-leaves tied up in a large leaf, and fastened to its place at three points by strings. The lower fastening is done so as to be out of sight.

The mask, of which a diagram is given here, was worn at many dances during several years, by a leading man among the Senecas.

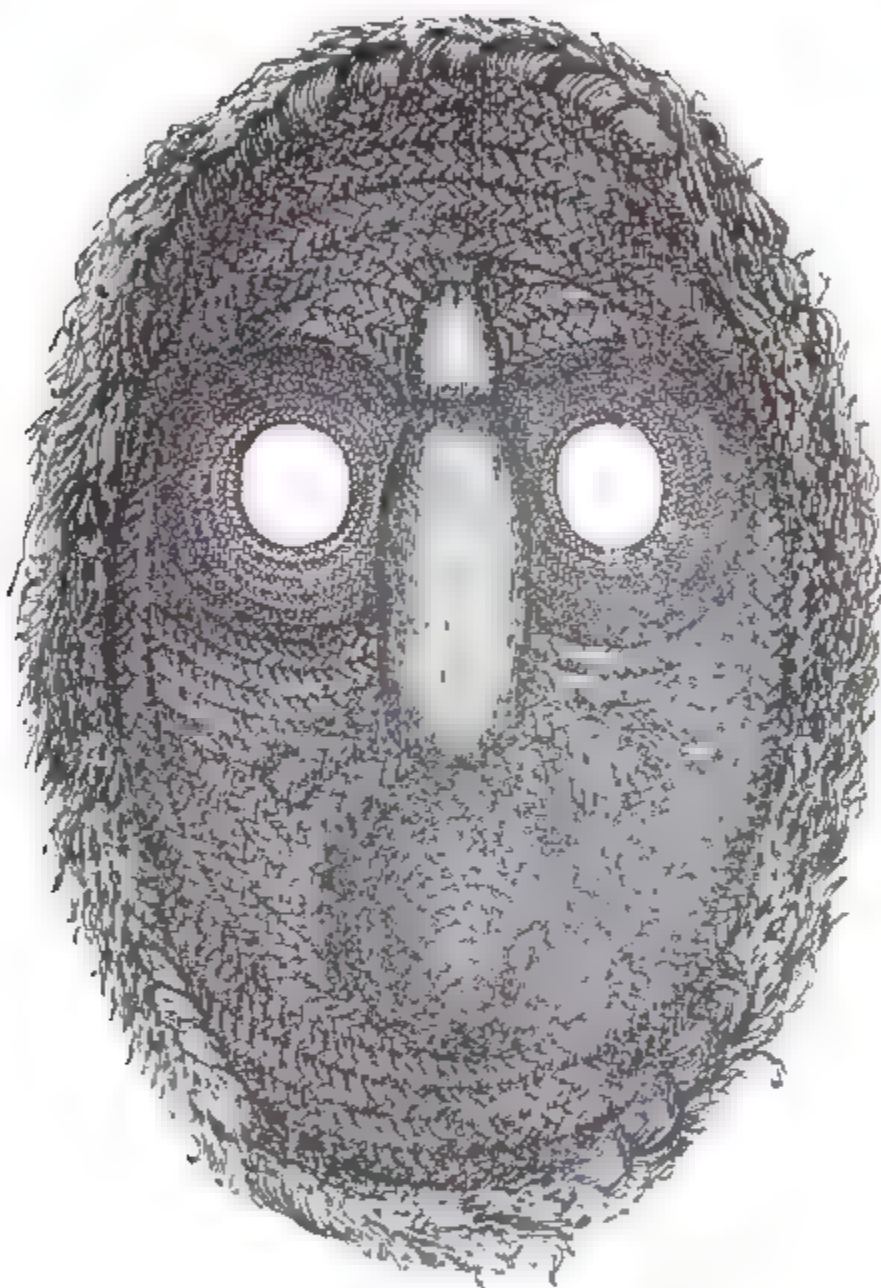


Fig. 83.

Since this was written we have acquired what is, in some respects, a more ingeniously made husk mask, the nose of which is formed by a continuation of the plait-work used to make the eyes.

THE WINONA STONE.

In a "new country," such as ours is, the records of two or three hundred years take us into the period of our ancient history, and even the occurrences of last century possess a halo of antiquity. 1776 is an important date in the history of Great Britain as well as of North America—to Canadians scarcely less than to the people of the United States, the events of that time meant nationality. Settlement in Upper Canada, but wholly along the frontier, became active, mainly by the arrival of contingents and individuals from the terri-

tory of the newly organized Government, and among the districts then occupied by the immigrants was the tract forming the western townships on the south shore of Lake Ontario. In the township of Saltfleet the escarpment known as the "mountain" runs almost parallel with the lake, and only some two or three miles from the shore.

On the face of this cliff, and on what is known as the E. D. Smith farm, near Winona, about a mile east of the McNeilly Mountain road, a boy named Charles Cooper in the fall of 1899 came upon the stone of which figure 84, (26,987), is an illustration. The boy was trying to dig out a rabbit, when he found the stone along with a few Indian relics about a foot from the surface. Subsequently



Fig. 84 (26,987.)

this stone carving came into the possession of Mr. Edgar E. Farewell, of Grimsby, who very kindly presented it to the museum.

It is six inches and a half high, seven inches and a half wide along the base, and averages an inch and a half in thickness. The material is limestone, apparently of the variety known as lithographic, and resembles the German rather than the Canadian stone. Even the carved head seemingly has a Teutonic feeling about it, but it is chiefly the nature of the stone that raises a doubt as to the origin of the work. Was it brought, just as found, across the sea? Was only the stone brought, and the carving done here? These and such queries as, who is represented? What did he do in 1776? Why was the stone buried in such a place, and how did it become

associated with the Indian relics? will, in all probability, never be answered.

Of one thing we may be quite sure, the work is not Indian, and perhaps we are also safe in saying that is the oldest-date-bearing stone in the Province, exclusive, perhaps, of a few tombstones.*

Regarded from this point of view, it may be excusable to find a place in this report for a reference to the Winona stone.

MEXICAN MARBLE MASK.

The marble specimen represented here, figure 85, (12,174), from San Juan Teotihuacan, a few miles northwest of the city of Mexico, is almost as rude in conception and execution as is anything we find made by Indians farther north.

Excepting only the simple scroll on the forehead, it is of the schoolboy type.

Its use is unknown. It may have been an architectural ornament, and if so, was probably attached by means of the projections on the sides.



· Fig. 85 (12,174) $\frac{3}{4}$ dia .

In workmanship it is even more primitive than many specimens are that we have found in Ontario, and it is here introduced for the purpose of comparison with these, from which it is distinguished mainly by its larger size, for while our old people seldom attempted anything in stone beyond a pipe-head, the ancient Mexicans frequently handled material of this kind, weighing hundred weights, and even tons, upon which they carved elaborate patterns.

*In Paper No. 10 of the Niagara Historical Society, "Inscriptions and Graves in the Niagara Peninsula," by Janet Carnochan, there is no record of any date so remote as 1776.

In a sense, there is no carving on figure 85, for all the work is the result of boring and rubbing.

ONEIDA MOUNDS.

Quite a number of years ago I was informed by Dr. G. A. McCallum, now Superintendent of the London Asylum, that there were certain mounds of considerable size in the township of Oneida, Haldimand county, some five or six miles from the village of Cayuga. More recently other persons have mentioned these mounds, and one of the latest to do so was Mr. A. K. Goodman, LL.B., barrister, of Cayuga.

Having written to Mr. Clark Vanderburg, the owner of the farm on which the mounds exist, this gentleman was good enough to reply that he would "freely give, on behalf of the Ontario Government, permission to excavate and examine the mounds" on his farm. Our experience in 1901 with the Messrs. Bradt, concerning the Yellow Point Mound in Louth township, taught the necessity of caution. Mr. Vanderburg, however, is a gentleman who is only anxious to do all he can towards furthering the interests of archæology, without any reference to "how much there is in it," for himself.

A visit to the Vanderburg farm in June last enabled one to realise why so much had been said with regard to the mounds there, for they occur on low, level land, and form a group of some six or eight, quite close together—closer, indeed, than artificial structures of this kind usually are.

No measurements were made, but, speaking roughly, the mounds are from forty to sixty feet in diameter, and some of them appear to be upwards of ten feet in height. All of them approach the circular form.

To examine even one of these in a thorough way would demand a good deal of time and the expenditure of more money than was warranted just then, but there can be no doubt as to the desirability of opening at least one of these, if for no other purpose than to ascertain the nature of its structure, and thus to settle what has been for more than half a century a cause of wonderment to all who reside in that part of the country, as well to others from a distance.

The educational value of proving either a positive or a negative along the archæological line would lead to an opposite conclusion geologically, and the settlement of such a question is of considerable importance among an intelligent community.

The relation of these mounds to one another and to the surrounding country is such as to make their existence quite as anomalous, or inexplicable from the geological, as from the archæological point of view.

When seen by the writer, several of them were still surrounded by from two, to perhaps four or five feet of water which had remained since spring.

THE HOUSE OF THE DEVIL.

As long ago as April 21st, 1903, General Clark, of Auburn, N.Y., wrote to me that in the course of his reading he had come across an extremely curious and interesting statement connected with the visit of an "American Gentleman" to Niagara Falls near the close of the eighteenth century.

The traveller in question wrote on May 17th, 1792, an account of his visit for "The American Apollo," Boston, January to September, 1792, p. 321, and this was subsequently quoted in the Historical Magazine, Vol. VII., 2nd series, p. 15.

The following is the quotation as forwarded to me by General Clark:

EXTRACT OF A LETTER FROM AN AMERICAN GENTLEMAN AT NIAGARA, DATED MAY 17, 1792.

"I have seen the celebrated Falls of Niagara. It is situated eighteen miles above Lake Ontario, and as many below Lake Erie. There all the water which the lake and rivers collect for upwards of 1,500 miles falls down a perpendicular descent of 142 feet. Below, for the space of 100 yards, one cannot see the water, by reason of a thick fog which rises and forms a continual cloud; in which, in a clear day, one may see a rainbow morning and evening.

"The cavern which the Mississaugas call *Manito ah Wigwam* or *House of the Devil* is a curiosity of which I never remember to have seen a description. It is situate about eight miles from the west end of Lake Ontario. The mountains which surround the lake at this place break off and form a precipice of 200 feet perpendicular descent, at the bottom of which the cavern begins. The first opening is large enough for three men to walk abreast without interfering. It continues in this manner for seventy yards horizontally, then it falls perpendicular fifty yards of which I gained the bottom by steps of one, two, three, and four feet; then it continues fifty yards horizontally, at the end of which I discovered another perpendicular descent; but as there were no stone steps and the air of the cavern was intensely cold I proceeded no farther.

"The explosions which it sends out about once a week in the spring and autumn shake the ground for 16 miles around to such a degree that the furniture is often jarred from the shelves in the houses."

Concise as this account is, it is yet sufficiently circumstantial to bear the appearance of truthfulness. We have the distance of the cavern from Hamilton; its situation in relation to the escarpment; the size of the entrance; the length of the passages; the connection of these by means of "steps;" and the "American Gentleman's" reasons for proceeding no farther than a hundred and ten yards horizontally, and fifty yards downwards. Besides all this, we are assured that about once a week in the spring and autumn "it sends out explosions that shake the ground for sixteen miles around."

On receipt of General Clark's letter I wrote to Mr. A. B. Foran, postmaster of Winona, a village some ten miles east of Hamilton, and lying between the lake shore and the base of the mountain, asking whether he, as a native of the district, knew about any such place as the cave referred to.

Mr. Foran replied: "that he had never heard of any large cave along the face or foot of the mountain," and that since receiving my letter he had not only made numerous enquiries, but had spent the whole of Queen's birthday in "looking up" the cave, without any success. He mentioned, however, that he had heard of a cavity in the rocks near the "Burning Springs" at Mt. Albion, and that on one occasion the village blacksmith having determined to explore it, struck a match near its entrance, when an explosion took place, blowing him some fifteen or twenty feet down the bank. His beard was burned off, and his face and hands were badly scorched also, as results of his temerity.

This information was so encouraging that I decided to visit the place on the 7th of August last. At Stoney Creek, I was met by Messrs. A. B. Foran, J. H. Smith, Inspector of Public Schools, Ex-

Warden Murray Pettit, and C. W. Harrison, M.A., Head Master of the Grimsby High School. To all these gentlemen, especially to Mr. Foran, my thanks are due for the many courtesies they extended to me during this visit.

From Stoney Creek we drove westwards about three miles until we reached Big Creek, which finds its way lakewards through a deep gorge in the mountain. Under the guidance of Mr. Foran we had anything but an easy walk up the stoney, and almost dry bed of this creek, for what seemed at least two miles, but which was, in reality, only one, when we reached a place where the gully formed a roughly circular space about two hundred feet wide, and not far from nearly half as many high, but we discovered no sign of anything in the shape of a cave, either large or small. Mr. Foran assured us we were not far from it, but as it had been pointed out to him from the top of the cliff, he was not at all sure of his bearings.

The following day we were more successful. Mr. Foran and I drove to Mount Albion post office, where we met Mr. James A. Davis, who, within ten minutes, conducted us to a small triangular opening in the face of the cliff at a great height above the bed of Big Creek, and not more than six or seven feet below the edge of the declivity, although fully fifty feet below the crown of the slope leading to it. This, then, was the cave where the explosion took place that sent the blacksmith rolling down the bank!

The entrance, as already stated, is three-cornered, and not more than three feet high. Without much labor it would be impossible for a man to enter the place, and as far as could be guessed from what was visible, there was no enlargement within. Pushing myself in as far as my shoulders would permit, no gaseous or other smell was perceptible, except that of dampness.

The place is situated on lot 34, concession 6, township of Saltfleet.

We were told that people go from Hamilton to visit the Devil's Cave, as it is called, but what they go "out for to see" is not very evident. Possibly the entrance is now less than it was some years ago when a man named Barrett, a fugitive from justice, is said to have hidden himself here for some weeks.

In any event the place does not correspond to the one described by "An American Gentleman" in 1792, in the very important particular that his cave was at the bottom of a precipice two hundred feet high.

However improbable as is the existence of such an enormous cavity as that so minutely described by the "American Gentleman," it would be rash to deny its possibility, because limestone formations are not infrequently characterised by caverns of considerable extent, and we can easily conceive of the entrance to a place of this kind at the base of an escarpment two hundred feet high, becoming utterly lost to sight, either by a landslide, or by the accumulation of detritus during many years.

In either case there is not much likelihood of its being re-discovered, especially as the neighborhood possesses not even a shred of tradition respecting its existence, and we know that the land has been settled all the way from the mouth of the Niagara to Burlington Bay or "The Head of the Lake" since the year 1776.

It may interest the reader to know what General Clark says respecting widely-spread, Indian, cavern myths:

"The story told of the cave known as the 'Devil's Hole' is of the same class of mythological ideas as are those already referred to. It was the evil spirit or rather the mischievous spirits that made all the bad places such as water-falls, and dangerous points, and the general business of the good spirit was to correct, as far as possible, these evils which generally resulted in the killing of the snake, or evil spirit. In this case, according to the story, the snake was killed on Buffalo Creek, and floated down to the Falls, and so damned the water that the rocks under and behind the monster broke away and caused the Horse Shoe Fall. This legend of the Thunder Beings frequenting the vicinity of waterfalls and of caves in their vicinity has a very wide range. There was very generally a boss thunder-god with three assistants (four in all) with a great number of minor gods called Little Beings, as in the Cherokee myths. At the Falls of St. Anthony on the Mississippi the great spirit lived in a cave twenty or thirty miles away, and, very strange, he was identical with the graveyard frequenter who devoured the bodies of all good Indians either dead or alive. This god was a great snake with four legs and immense horns, described as a monster buffalo, etc. They made offerings because they feared him, and not for love. Now if the analogy holds good, and the Missassaga story is correct, this bad fellow had a permanent residence in the cave (House of the Devil) and occasionally on bright sunny days visited the Falls to show his fine suit of clothes, (the rainbow) or when the good thunder spirit removed to the west, as they all do, (because all thunder storms in this latitude came from the west) he may have had his regular home in this cave. . . . The Dacotahs all connect this great deity with their graveyards, and in the horrid form of having four legs and immense horns. The same idea, or nearly so, appears in the fearful monster seen by Marquette and Joliet, painted on the rocks—in the latter case, the being had eagle's claws, etc., etc.

"If such a cave ever had any existence it should be found and described. It may lead to very interesting results aside from mythology."

AN OLD DAM ON THE GRAND RIVER.

On the principle that "Prevention is better than cure" it is always to be desired that doubts should be removed and mistakes corrected, if possible, before wrong beliefs become fixed. In Europe many erroneous views are popularly entertained respecting topographical and architectural features, the origins of which were for a long time unknown, and even on this continent, young, in a sense, as it is, we are not without examples of a like kind.

Shortly after the identification of the Otonabee Serpent Mound numerous letters were received at the Provincial Museum, the writers expressing themselves with more or less certainty as to the existence of similar earthworks elsewhere. Several of the most likely localities thus referred to were examined, but in no instance was the claim of artificiality sustained.* It can hardly be doubted that had not

*For particulars connected with these examinations see *Archæological Report for 1896-7*.

the facts been ascertained, connected with the structure of those so-called "serpent mounds" some, if not all, of the ridges in question would have acquired a false reputation.

For some years Mr. John Jefferson, of Paris, Ont., has known that on his farm, lot 10, concession 1, Brantford township, there exists a somewhat unusual combination of sticks and logs, close to the channel of the Grand River, on its right bank. Mr. Jefferson having made several examinations without in any way disturbing the order, or destroying the appearance of the arrangement, discovered that about two feet below the ordinary high water mark there are logs laid in line with the edge of the river bank, and that these form a backing, or support, for a row of stakes, of which only the ends may now be seen on a level with the surface of the ground, Mr. Jefferson gives the total length of this work as two hundred and eighty feet.

Naturally enough, one is apt to conclude that every rudely put-together, or ruinous and aged-looking structure having no known European or white man's origin must be indebted to the Indian for its existence, and there can scarcely be a doubt that but for this gentleman's intelligent caution the peculiar timber arrangement would, in course of time, be regarded as a piece of native handiwork. Indeed, it is already spoken of in Paris as "the old longhouse," if one may judge from a remark made respecting it by a resident of the town.*

On the 25th of April I accompanied Mr. Jefferson and his son Mr. Leonard Jefferson to the ground, where it was only necessary to do a little digging to produce evidence for a verdict of "not guilty," as far as the Indian was concerned.

The first remaining piece of one of the uprights that we removed proved to be the end of a pine slab, and the second turned out to be "another of the same". These pieces were about eighteen inches long, squarely cut across on the lower end, and must have been taken from a log, or logs, not less than two and a half feet in diameter. On former occasions when similar examinations were made, nothing of this kind had been found. But although the presence of the pine slabs was sufficient to dispel every notion respecting any possible, or rather, any probable connection of the work with Indian economy, we discussed with some interest how to account for the wooden wall.

A somewhat careful examination of the ground surface showed the water extending about two hundred feet back from a decided depression, the width of which corresponds to the length of the river-side row of stakes, and the inference was drawn that in some way these conditions were connected.

Without more data than we had upon which to form an opinion, we could only surmise along the most likely lines, and what struck us as having the greatest appearance of feasibility was that the wooden structure had been erected as a barrier to separate the waters of the river from those of a pond that occupied the hollow, which pond may have been used for holding saw-logs at an early date in the history of the district—perhaps even as early as one of the French mission periods when, scanty as the supply may have been, sawn

*The Indians constructed no kind of permanent dwelling near streams navigable for canoes, and for this they had excellent reasons—reasons, too, that will readily occur to any intelligent reader.

material was required for building purposes, in accordance with European notions of comfort and convenience. Mission stations were not complete without a smith and a carpenter, but not seldom the missionaries themselves were qualified to act in one or in both capacities.

At any rate, the pine slabs were proof that either on this spot or at no great distance up stream the grating and rasping of the old pit saw, worked by the top and bottom sawyers, had broken the silence of the seventeenth century forest on the banks of the Ootinawatawa.*

In confirmation of the supposition that the wooden breastwork served in a small way to form a dam, Mr. Jefferson pointed to lumps of blue clay that were adherent in patches on the face of the work, as if for the purpose of puddling the joints, and this clay, he said, had, no, doubt, been brought from a deposit that exists up the river.

It has been suggested that the pond formed here was meant for saw-logs, but there is nothing to evidence such intention. On the other hand, the structure may have been made to prevent the river from cutting a channel for itself across the bottom-land traversed by the depression already mentioned, and thus eventually carrying away some acres of good land farther down, or, the purpose may have been to form a fish-trap, or fish-pond.

But while there exists a doubt respecting the object of the work, and not a particle of information as to the workers, or when they worked, of one thing we may be quite certain, namely, that it is not an example of primitive man's engineering.

VILLAGE SITES AND OCCUPATIONS.

When visiting various places that are known throughout the province as having been Indian resorts, or places of abode, it is sometimes not easy to see why they were thus chosen. In other cases one has no difficulty in perceiving why the choice was made, and it is noticeable that not a few of our chief centres of population have grown up round the sites of Indian villages. While it is true that none of the old spots were permanently occupied any longer than the natives with even their simple notions of comfort and cleanliness, thought desirable, removals were never made to any great distance, and not infrequently the same ground was occupied several times, either by descendants of the same people or by people of other tribes. Indeed, it is to a large extent on account of the latter condition that we have so much difficulty in classifying "finds" on village sites when these have been disturbed by the plough, and even sometimes when careful spade work has come first. But although there would, undoubtedly, be a certain amount of satisfaction in being able to determine a first, or any subsequent deposit of material where village sites and kitchen middens are concerned, it would be impossible to gain very much, if anything, from such knowledge, because, in a general way, all the natives, whether Huron-Iroquoian or Algonkian,

*Parties of Frenchmen headed by Joliet and Brehaut de Galinée were in this neighborhood during the last week of September, 1669, and Galinée must have passed the place referred to on the Jefferson farm early in October.

See pp. 45-49, Ontario Historical Society Papers and Records, Vol. IV containing a translation of Galinée's Journal, by James H. Coyne, B. A.

were a good deal alike in every way. Of one thing only can we ever feel quite sure, and it is when we meet with objects of iron, brass or glass, for then we know we are dealing with a time subsequent to the Discovery, and contrariwise, we may feel tolerably certain that when we meet with nothing of European origin we are dealing with a pre-discovery conditon.

It is nearly always disappointing to find evidence of the white man, even should the unearthed objects, when there are any, prove either numerous or varied.

We may feel assured that there was invariably some locality reason for the selection of a village site, and it should be the duty of the archæological student to determine, if possible, what that reason was. The ground chosen was usually dry, and in most cases high. It was never quite close to a lake, or navigable river shore, and was sometimes from half a mile to a mile away. A supply of water for drinking was not of as much account to the Indian as was a means of defence, but when streams were not canoeable we find the camp grounds close to the water, yet, if possible, on high ground.

In some of these at a distance of several miles from navigable water much time has been given to the making of pottery, bone awls or needles, and probably of articles in wood, all traces of the last having long since disappeared, and we must conclude either that the people retired to a secluded place to carry on this work undisturbedly, or that such places were chosen by those who made a specialty of this or that product.

Exception may be taken to the use of the word specialty in this connection, and yet we are not without reason for believing that among the numerous village sites that dot many sections of the province there were here and there, if not little Montreals and Torontos, not a few little Galts and Brantfords.

About six or seven miles north of Lake Ontario, on Yonge street, a special industry was bone-working—bone awls and bone beads have been collected in considerable quantities; while only about ten miles to the northwest, in Vaughan, the people appear to have devoted their attention to making clay pots.

Again, in the country of the Hurons we meet with many tobacco pipes, while in Middlesex and neighboring western counties there is a multiplicity of plain celts. In the Rideau valley gouges prevail, and along the Erie shore in Welland we find chert arrow-heads in various stages of making, all of which goes to show that the people of various localities devoted themselves in large measure to particular kinds of work, and that in all probability they exchanged their products for those of different sorts made by other peoples; and the inference is fair, namely, that they who had the best supply of any particular kind of raw material used it in the most suggestive way, and that thus they naturally became expert in the making of certain articles.

Here, then, we have examples of the simple beginnings of commerce.

On the authority of the Jesuit Relations we know that the tobacco trade was largely monopolised by the Tionnontates, or Petuns, and on a still larger scale we possess the most tangible kind of proof

respecting the trade that existed between the Huron-Iroquois of Canada and the natives of what are now the gulf states.

Mr. Clarence B. Moore's explorations in Florida have brought to light numerous examples of tools and ornaments made from native copper, the principal sources of which are on the north and south shores of Lake Superior; while in the graves of the Hurons, as well as in those of the Eries, are found large shells from the Gulf of Mexico coast—the inference is plain.

Occasionally we find bone and stone tools suggestive of Eskimo origin, and a few catlinite pipes have turned up in situations that indicate long-ago "trade relations" between our own natives and those of the Great Northwest.

ANTHROPOLOGY AT THE WORLD'S FAIR, ST. LOUIS.

With the consent of the Minister of Education I accepted an invitation to attend the International Congress of Arts and Science held in St. Louis September 19th to 25th. At the meetings of the various sections there were representatives from several European countries, but the majority of those in attendance belonged to the United States.

Of the meetings that were held by the anthropological section there is really little or nothing to be said, but the case was very different in connection with the arrangements made for the practical illustrations of manners, and mode of living on the part of American aborigines from Canada to Patagonia. The variety of dwellings was, in itself, a study. These were of skin, cloth, clay and wood, and the "architecture" of one was composite enough to include samples of all of these materials. In size, shape and style of accommodation the domiciles differed quite as much. Some were scarcely big enough for half a dozen inmates to huddle, while others were sufficiently commodious to afford dancing-room for a hundred. The very best habitation, evidencing not only mechanical skill, but artistic taste, and tolerably high notions of comfort, was that erected by our British Columbian Indians, built as it was of heavy hand-hewn pine planks, placed upright, covered with a gable roof, and entered by means of a well made door swung on ingeniously constructed wooden hinges.

By far the largest area devoted to this immense ethnological exhibit was occupied by the Phillipinos, whose bamboo houses were built over the water round the shore, the approach to each dwelling being along a short gangway also formed of bamboo. In large buildings were exhibited specimens of everything, one would suppose, that finds a place in Philippine economy.

Under the guidance of Dr. G. A. Dorsay of the Field Columbian Museum, Chicago, we had entry to all the buildings of every kind. In many of the larger domiciliary structures Dr. Dorsay had made arrangements for the performance of dances by the natives for the benefit of the visitors. The most interesting of these were given

*Just as this goes to press, June, 1905, a letter from Mr. C. B. Moore, who has recently returned to Philadelphia after his winter's work in the south, informs me that he found in Alabama "a copper fish-hook, unbarbed, but grooved for a line," and that he "believes this to be the first ever found in the south."

in a very large circularly constructed prairie lodge or tepee, and in the British Columbian house.

It is needless to say that all the dances bore a religious or superstitious significance. Many of them consisted of simple foot motions in addition to walking-steps as the dancers moved about in a circle, while others were made up mainly of body motions, neither graceful in themselves nor edifying to the onlookers. Of the latter kind there were the dances of the African pygmies, who certainly did their parts with great good-nature, and more than a little vivacity.

By common consent our own Pacific coast natives surpassed all others in their performances, being more diversified, more picturesque, more imaginative, and in every way more dramatic, showing, therefore, a considerably higher condition of mind than that not only of other coast tribes, but of the prairie Indians.

Archæologically, the exhibits as a whole were a failure. In the "Anthropological" building proper, where material of an archæological description was supposed to be in evidence, the only exhibit worthy of more than a casual examination was that of Ohio, under the direct supervision of Mr. W. C. Mills, the state curator. The neighborhood of this state to Ontario, and the fact that its northern portion was inhabited by the Cats or Eries of Huron-Iroquoian stock, must always tend to make an Ohio collection peculiarly interesting to us, and the arrangement made by Mr. Mills was all it ought to be for the purpose of study.

Dr. W. J. McGee, of Washington, was the official in charge of the Anthropological Department of the Exposition, and to him much credit is due for the excellent opportunities his department offered. The knowledge, time, and attention devoted by him to the work were well exemplified, but no doubt it was "a labor of love."

It is much to be regretted that at all meetings such as were those held under the auspices of the International Congress, most of the time is occupied in the reading of papers, and not seldom in foreign languages—languages unintelligible to four-fifths of the audience which must sit and sit hour after hour, longing for a release from so much misery. Besides the very few who are polyglotted, there are always a few more who pretend they know "every word of it," but even to both of these classes as well as to the great majority it must prove a "weariness to the flesh" besides a positive loss of time to sit perforce so long while what are often inane papers are being badly read, or papers the contents of which even if worth perusal at all, might be much more profitably read at other times, in the form of translations.

It would seem improper for any one to inflict a paper in his own language on an audience, only a few members of which can understand him, however agreeable it may be to him to hear himself talk, and it is perhaps equally wrong to occupy time in this way even when all present may be able to follow him, unless he has something to say requiring explanation by means of diagrams, or specimens.

Perhaps another exceptional case would be that of one who wishes to announce a discovery, or some new development.

AN EXAMPLE OF PRIMITIVE PERSISTENCE.

In one of the Phillipine buildings at the World's Fair in St. Louis there were exhibited the tools and appliances of a native blacksmith shop. Among these it was noticeable that hammer-heads were attached to handles by the primitive method illustrated by figure 86, almost exactly as stone axes are yet handled in the New Hebrides, and as it is probable many, if not all, of our ungrooved North



Fig. 86.

American axes and hammers were also treated. The hammer-head of iron, or of steel, is made round in cross section, but with a slight taper towards the poll. The handle is made from a wooden knee, the face of which is hollowed to form a seat for the upper half of the iron head, and the two are bound together as shown in the figure.

It is not easy to say just why this method of attachment has been retained, but there can be no doubt as to its origin. At any rate, it illustrates somewhat curiously the persistence of a neolithic fashion, and its projection into the metallic age. It would be interesting to know whether the ancient method has been kept up owing to the difficulty of punching a hole in the head, or because when the handle is fastened in this way the workman's hand is less jarred than it is when the handle is wedged tightly into a hole.

THE OJIBWAS OF LAKES HURON AND SIMCOE.

By J. HUGH HAMMOND.

This people came from the north shore of Lake Superior about the time of the expulsion of the Hurons by the Iroquois in or about the years 1648 to 1660, and after a long series of fights drove out the Iroquois and possessed the lands lately held by their enemies. The territory occupied by the Ojibwas may be shortly described as the tract of land stretching from Collins' Inlet on the northeastern shore of the Georgian Bay, to the eastern limits of the lands claimed by the Mississaugas, thence south to include various reserves widely separated, but mostly in Western Ontario.

The last great struggle between the Iroquois and the Ojibwas occurred near the present site of the town of Orillia, by the complete extinction of the Iroquois bands then occupying this territory. The

traditions of the Ojibwas describe the final battle and the incidents in connection therewith, one of which was the impalement of the Mohawk Chief's wife by the victorious Ojibwas. On Quarry Point, township of Rama, there was a rock having painted thereon some of the incidents in connection with this last contest for supremacy. This rock has now fallen into the water, and possibly ere this the painting has been washed away by the action of water and ice.

The Ojibwas were divided as was the custom among the aborigines into different tribes and clans or totems named respectively, the reindeer, the catfish, the otter, the pike and the snake, and each totem had its head chief who represented his people in the councils of the nation. These assembled from time to time in their long-house at Orillia to settle the affairs of the nation in peace as well as in war.

The territory in which the Ojibwas settled was rich in furs and furnished them liberally with the means to trade with the whites. The otter, beaver, mink, and small fur-bearing animals were numerous, and the moose, the red deer and wolves and bears ranged in countless numbers through the woods. In the waters of the lakes and rivers fish of many kinds abounded, so that there was no lack of the necessary provender in the winter season.

These people are not of an agricultural turn, but rather given to hunting and fishing, hence it will be found that they are not a tall people, being on the average but five feet six, or seven, inches in height, while the body and arms of the individual are well developed. They are all keen canoeists and hunters, and make the best of guides, being faithful and painstaking to a degree. Numbers of the younger men work on the rivers and in the saw-mills during the milling season, but they lack the perseverance of the white in this occupation. Take them, however, at their own work of canoeing, or on the portage, they easily outdo the most hardy white. Though each head of a family has a small land-holding, on the reserve, it is only partially cleared, and but a very small part of it is cultivated, because the men are away during most of the summer season employed as guides by tourists and others.

A large portion of the lands originally owned and occupied by these people has been bought by the Government, the first record we have is in the year 1795 when for the sum of one hundred pounds they sold to the Government of the old Province of Canada 28,000 acres. In 1815 a further tract of 250,000 acres was sold by them to the Government for the sum of four thousand pounds. In 1818 they surrendered 1,542,000 acres for a perpetual annuity of twelve hundred pounds payable to them and their children. In 1836 Sir John Colborne obtained an agreement from them to surrender the lands on both sides of the portage road stretching from Orillia town to Coldwater, on which they were located six years previously by him. There is still a tract of land stretching from Moose Deer Point on the Georgian Bay south to a line drawn through Mitchell Square in the township of Oro, in the county of Simcoe, which has never been ceded by the Ojibwas, and they are now pressing on the Government of the Dominion of Canada for the payment of this territory in the shape of increased annuity. They at present own and occupy the reserve in the township of Rama, consisting of 1,600 acres, Snake and Machego islands in Lake Simcoe, and the smaller islands in Lake

Couchiching, together with the Christian Islands in the Georgian Bay.

This tribe is divided into three bands called the Rama, Snake Island and Beausoliel Island bands from their location; and some time since the Government introduced the system of electing their chiefs and councils. This has not been an unmixed success, as a large portion of the Ojibwas still look to the old chieftains as their legitimate rulers. Of the latter class are Yellowhead, Assance, and Snake, or, to give them their Indian names, Misqukey, Big Bear, and Kinabicoanini. The elective chiefs are Benson, Big Canoe, and Monague. On each reserve there is a resident missionary and mission school, though the children do not take kindly to the white man's ways, yet some progress has been made.*

Each reserve has an agent who looks after the welfare of the band, pays annuities, and generally supervises the conduct of the Indians. They are largely christian, though there are still some of the families who are pagan in practice, if not in profession. The population of the reserve is decreasing owing to the ravages of disease, especially of consumption, to which the conditions of life makes them susceptible.

These people possess many traditions as to the progress of their "nation" from the Great water to the West till they arrived at their present resting place. They also have the tradition of the Great White God, Wahbe, Manedoo, and the great White Bear, Wahbemaquut. Outside of these which are generally known to all of the older members of the tribe they have none showing their origin. There are not many of this nation left of pure blood.

In the different treaties the spelling of their tribal name varies—some have Chipawa, others Chippewa, again it is Chippawas, and Ojibway. Doubtless, the writers of the different treaties spelt the name as it caught their ears.

The writer has had the privilege of attending a general council of this tribe, and the addresses delivered were apparently of a high order, and generally appreciated by the assembly. The sound of the voices was almost musical, the gestures emphatic, and the applause was manifested by the ejaculation "Hay-hay-oneshesshin." Freely translated this would be: "Hear, Hear, it is good."

The bane of this people has been hitherto the whiskey supplied by the white race. For this the Indian would part with his most treasured possessions, and thus like most aboriginal races, he became a slave to the drink-habit. Latterly, however, the law has been more strictly enforced, and a large body of the Indians are total abstainers, though there are still some who love the "ishkoota waboo" (fire-water).

They are not now, and perhaps never will be, an agricultural people, owing to their hereditary proclivities which make them wanderers, hunters, trappers and fishermen.

*Whatever may be the case on the Beausoliel and Snake Island Reserves, it may very easily be understood why "the children do not take kindly to the white man's ways," as they have these "ways" exemplified by the irascible old man in charge of the Rama school, and if the children make "some progress" in this school they deserve infinite credit. The teacher is truly an "active volcano," and the treatment he metes out to the poor little Indians, would not be tolerated among white children for more than one day.—D. B.

CAHIAGUE.

By J. HUGH HAMMOND.

Mr. Hunter, in his notes on the Huron villages in Oro township, county of Simcoe, says: "the best evidence, therefore, seems to point to the Buchanan site, etc." There is another site that should have been taken into consideration before final judgment was pronounced, namely, the Mount Slaven site near Orillia town. I presume that a fair discussion and comparison of the two sites would perhaps aid in fixing definitely the position of the Huron town, Cahiaque.

Referring to the written history of this place we are told in Parkman, quoting Champlain's Journal that the town of Cahiaque was the metropolis of the Hurons, and contained in the neighborhood of two hundred cabins, that it was on the frontier of the Huron country, and that he (Champlain) arrived at this place on the 17th of August, 1615, stayed here until the 8th of September, and then proceeded to the Narrows to supply themselves with fish before starting on the raid; that this place (Cahiaque) was situated three leagues west of the river Severn, in the now township of Orillia; that he (Champlain) returned to this place after the raid, and wintered here, visiting the Neutral Nation to the south, with the Friar Le Caron before starting on his return journey to Quebec; that in the spring of 1616 he was well on his way home when at the lake of the Nipissings he was overtaken by a messenger and had to return to Cahiaque, to the great council house there, to settle an emeute between the Algonkins and the Hurons who had, prior to his coming, had a battle at this place over the death of an Iroquois prisoner that the Algonkins had adopted, and the Hurons had slain. A peace was concluded, and he (Champlain) departed, never to return. In the Jesuit Relations, 1648, chap. 4, Ragueneau says the Arendarronnons abandoned their frontier villages and fell back on the more populous places as a support in the year 1647. Martin, in his life of Jogues (appendix) identifies Cahiaque with Contarea, this place being described by Brebeuf as lying on the frontier of the Hurons.

The only map in existence that describes the location of the Jesuit missions to the Hurons at this time is the Ducreux map published at Paris in the year 1660, which shews the missions as they were in the year 1640, and by this map St. Jean Baptiste Mission is placed on the frontier of the Huron nation, on the southwest side of a lake having a river running north out of the lake into the Georgian Bay, or, as described in another place, the lake of the Hurons, this lake is shown on the Sanson map published in Paris in 1656, and is called Lake Oentaron, and can be easily identified as Lake Simcoe, while Bass Lake does not appear on either of these maps at all. The above is all of the written or pictured history that we have to refer to, and, save the remains of these people, nothing is left.

Let us compare the natural features first of these two sites, viz., Buchanan's and Mount Slaven: Buchanan's is situated on the west half of lot 7, con. 13, Oro township, Mount Slaven on lot 8, in the 4th concession, South Orillia township; the distance of the Buchanan site from the Narrows of Lake Simcoe (the source of the food supply of the Hurons) is, say, five to six miles, Mount Slaven a scant

two miles; Buchanan's is distant from the Severn River about 16 to 17 miles, Mount Slaven about 12 miles. Now let us take the size of the two sites. Buchanan's is about seven or eight acres, Mount Slaven sixty to seventy acres. Again, let us compare the positions of the two sites as regards nearness to the known trails, the highways of these people. Mount Slaven is directly on the Coldwater and Muskoka trails, while Buchanan's is distant from both of these at least six miles. Take the canoe route or summer connection with the system of lakes, Mount Slaven had direct communication by a running stream, and Lake Couchiching, while Buchanan's was distant five miles from water that would lead to Lake Simcoe, or, as described on the Sanson map, Lake Oentaron. Take again the water supply, Buchanan's is by a small pond of stagnant water, Mount Slaven by living springs, and a running stream right on the camp site.

Let us compare the remains of these people, which, to an unbiased mind, must be the true and final test of the population of a locality. Buchanan's has few, if any, graves of this people, while Mount Slaven has an extensive burial ground. Take the ash heaps, pottery and pipes, we find that Buchanan's has few remains; Mount Slaven had an immense quantity. Again, if we take the axes and utensils of stone and iron, Buchanan's has few, if any, while at the other site in question the finds of both kinds are very plentiful, arrow heads and wampum are equally abundant at the Mount Slaven site, and so on through the whole of the known remains of this people, be they Arendaronnons or Algonkins.

Again, let us study the surrounding villages—I refer to the ancient Huron or Algonkin remains—Buchanan's is not a centre of population, while Mount Slaven is surrounded by villages on every side, viz., the Silver Creek sites to the northwest and north, Smith's Bay site and the Narrows on the east, the Cuppage-Day site to the southeast, and the Harvie, Coleman, Bass Lake and Rowe sites to the south and west, all within a radius of three miles from Mount Slaven, and the trails on top of the shore line directly in touch with this site.

It is claimed that the Mount Slaven site is not in a position where a defence could be made against an enemy, while Buchanan's is. It is well known that the palisading used by these aborigines was made of wood, and since the removal of these people some 250 years has elapsed, which would, in the ordinary course of events, rot away any trace of this work if such had been erected. I submit that if palisading were necessary it would be at the outlying villages, not at the centre of population whence aid would be given to the village attacked by the enemy.

What better defence could be asked for than a ring of villages a direct connection with all of the known trails, and a direct way of retreat by either land or water.

Giving these aborigines a fair share of the sense that we claim for ourselves, would it not be reasonable to suppose that they (1) would be attracted to the Mount Slaven site by the ease of communicating with one another by way of the trails, (2) the proximity of the food supply at the Narrows during the winter season, (3) the permanent water supply for domestic purposes, (4) the sheltered and at the same time easily defended position of the Mount Slaven site if de-

fence were necessary, Mount Slaven being surrounded by ridges on the south and west, and by the lakes on the north and east, (5) the ease of escape by land or water, and (6) the facility of communicating with their kindred in the adjoining district over the Coldwater or Muskoka trails. If the above facts and inferences are true, and they are easily provable, there can be only one conclusion arrived at, namely, that the Buchanan site was, with the other villages, simply a border village adhering to the metropolis in the centre, as was the McPhie, the Annis, the Smith's Bay, the Cuppage-Day, the Coleman, the Bass Lake and the Silver Creek sites.

THE COMING OF THE OJIBWAS.

An Ojibwa tradition of the coming of the Indian races into Ontario and the antagonism of the various races for each other as given by "Wendausum" (Lightning) and "Mesaquab" (getting into the land). "Shashwup-Kawin, was the name of the two nations of our people in Canada, that is the Ojibwas and the Mohawks. The Ojibwa chief, the great chief was called, Wabhemanidoo, the White God, and the Mohawk chief was called Wabhemaquut (The White Bear), they were friends, until Wabhemaquut came to Wabhemanidoo to get his daughter for his son, Wabhemanidoo's son went to Wabhemaquut's daughter. After this Wabhemaquut killed Wabhemanidoo's son at a great feast given by Wabhemaquut to which Wabhemanidoo had been invited. The Ojibwa Chief Wabhemanidoo went to the feast, and Wabhemaquut had a big maple dish at this feast, and Wabhemanidoo's son's head was put in the dish, and Wabhemanidoo was asked to eat his son's head, so Wabhemanidoo sat down and ate his son's head, and the feast was over. Wabhemanidoo went home. Not long after this Wabhemanidoo had a great feast, and slew Wabhemaquut's son. Wabhemanidoo invited Wabhemaquut to come to his feast, and Wabhemanidoo had a big dish, and put the head in it and handed it to Wabhemaquut to eat, so Wabhemaquut would not eat it. He was sorry, and cried, and said, Oh, my son's head; I will not eat it. Wabhemanidoo said you are not a man when you handed me my son's head, I was a man and I ate it, you have got to eat it. Wabhemaquut would not eat it, and said he would not. Wabhemanidoo got his war club and killed Wabhemaquut by striking him on the head; this was the beginning of the war between the two friends.

There was fighting at different places, and lake George was one of the battle grounds where the Mohawk village was. All of the Mohawks were killed here. The Ojibwa's head warrior was killed also. He was Wabhemanidoo's chief warrior. There was a Mohawk village between Penetanguishene and Orillia; these were all killed at this time. There was also a village of Mohawks at Atherley, and when the chief of the Mohawks saw Wabhemanidoo's chief warrior coming he went and met him, and made a feast with him. The end of the peace talk was that the Mohawks would carry water for the Chippewas when it was wanted, or become their slaves, so Wabhemanidoo's chief warrior forgave him.

There was another village of Mohawks at Skigawog or Pigeon Lake, these were all killed at the same time.

There was also a village of Mohawks at or near Kingston, on the lake, these were killed, too.

There is a rock at Quarry Point, now in the water, on which in an Indian picture all of this is written.

The bank at Lake George is where the fort of the Mohawks was and the village was close to it.

From this time on the Chippewas and Mohawks were enemies. There was another big battle on Manitoulin Island between Ojibwas and Mohawks; you will find some of the skulls there.

Inside of the wall at Lake George there is a lot of the bones of the dead Mohawks, and in the lake, too.

We don't know where our people come from, the only thing we know is four families were out in the water in a big canoe, and were lost in the fog, and were out of sight of land for a long time, maybe a week, then they strike the land in the wild bush, and hunt for a living.

Four or five families camp on a great rock by the water, and the rock moved out in the water for a long time, and after a while come to land in a strange place, they then had to hunt for a living. The rock was a big turtle."

NORTH AND SOUTH ORILLIA.

By J. HUGH HAMMOND.

[During the summer of 1904, in company with Mr. J. Hugh Hammond, barrister of Orillia, I had an excellent opportunity to examine a large number of village sites, camping grounds and trails in the township of North Orillia, respecting which so much has been written by my friend Mr. A. F. Hunter. Every reader of the Canadian Jesuit Revelations, and of Parkman's historical works must know how very closely the district in question was associated with the French occupation of Canada, and the papers that have frequently appeared in our reports cannot have failed to impress readers with some idea of the great value attaching to this part of the Province as an archæological field.

Mr. Hammond has for some years devoted his spare time to this territory, and has thus been able to add very much to our knowledge respecting its centres of population and its "highways." Necessarily, he has in some cases, overlapped ground already covered by Mr. Hunter, but he has also traversed many new, and therefore wholly unexamined tracts, with happy results. Following this is a paper in which Mr. Hammond tells his own story.

When going through these townships I was fortunate in meeting a number of people possessing Indian relics of various kinds, and who were good enough to present them to the Provincial Museum. This opportunity may therefore be taken to acknowledge the generosity of Mr. George A. Greer, Mr. Archibald Fyfe, Mr. John Ego, Mr. J. Stewart Nelson, Mr. and Mrs. Robert Anderson, and Mr. John H. Willey. A few good specimens were also procured by purchase from farm boys.]-D. B.

The following is an attempt to add to the history some more information regarding the sites of the Huron and Algonkin villages in this centre of population prior to the final raid of the Iroquois in the year 1649.

I propose to take the reader over the sites already found, and, where necessary, to add a further quota of information obtained during a summer spent in steadily going over the ground verifying every fact and, in many instances, visiting the same site repeatedly until the whole of the subject so far as limited time and opportunity would allow has been exhausted. Where the writer differs from that al-

ready written of this township by Mr. Hunter it is not in a carping or argumentative spirit, but simply that the whole subject may be thoroughly discussed, and, possibly, light obtained regarding these extinct peoples who lived, flourished and died before the white man put in an appearance in Canada, or, rather, our own Province of Ontario.

It will be well to avoid confusion to follow the numbering already used by the writer referred to above, Mr. Hunter adding, where necessary, to each village site its dependent site or sites. While the writer does not wish to arrogate to himself all of the knowledge of these townships archæologically, at the same time he wishes to add his mite to the growing knowledge of the Huron and Algonquin village sites in the townships above referred to.

Accompanying each site is a sketch map showing shape, size and direction of the ash heaps, and a short memo. of what has been found at each place by careful searching, verified in many instances by a further visit and search.

The township of South Orillia has been mapped and all of the sites located thereon, so far as the ability of the writer allows, showing the main trails which in every instance followed the highest ground of the locality. The village sites without a solitary exception were all located near springs or running water, and were easily defensible against the assaults of the enemy, dreaded by the inhabitants. The Arendaronnons or Rock clan of the Huron people inhabited this tract of country, and were looked upon as the rock of the Huron defence against the invading enemy. With the Lake Oentaron or Simcoe to the southeast, the villages of Oro to the south, the friendly Algonkins to the north and west, the metropolis of the Huron Cahiague, Kontarea or St. Jean Baptiste Mission was well guarded. The nearness of the Lake Oentaron or Simcoe and Kontarea or Couchiching gave to the Arendaronnons the fishing grounds necessary to provide them with provender during the winter season when the hunting was difficult, and supplies of food hard to obtain, while the many running streams furnished the beaver, the muskrat and mink, all to be taken into account in the larder of the sedentary Huron. The woods abounded in game, and deer, bear, moose and wolves were to be had for the hunting. So that in spite of the tribal differences and emeutes this section was the centre of the Huron society.

The trail by which Champlain departed for his famous raid on the Iroquois in the month of September, A. D. 1615, started from where the town of Orillia is now situate, proceeding to the fishing place, Mitchekun, or the staked place at the Narrows between the lakes Oentaron and Kontarea, they supplied themselves with the necessary provender in the shape of fish, thence by canoe and land along the north shore of Lake Oentaron to the mouth of the Talbot River, from thence across the portage to Balsam Lake, and the system of the Trent waters proceeded to the State of New York. Returning in the month of December of the same year he (Champlain) wintered at Cahiague, visiting during the winter the nearby Tobacco Nation in the Highlands of Nottawasaga township. On his return in the spring he again made a fresh departure on his way home to Quebec, and had reached the lake of the Nipissings when a runner despatched by the Hurons and Algonkins caused his return to Cahi-

gue to settle, if possible, an emeute that had arisen after he had departed, over an Iroquois prisoner adopted by the Algonkins and slain by the Hurons.

Outside of the Jesuit Relations and Journals and the Ducreux inset map of the Missions of the Jesuits we have nothing to found any history on, save and except the village sites themselves, and the remains found therein and thereon.

There are a few of the earlier settlers, who, being of an observant frame of mind, noticed the remains, and have been kindness itself in furnishing any information at their command, and ungrudgingly giving their time to accompany the writer in the search. To these, and they are many, the thanks of the student is due.

I propose to start at the southern end of South Orillia and follow the trails and note the villages as they occur, for all of the village sites have a connection with the trails, being either directly on, or near the highways of this people.

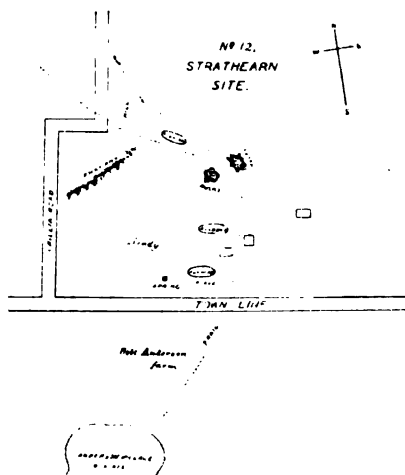
Site XIII. west half lot 13, con. 1, South Orillia.

In addition to that already written the following information and map will be of aid to the archæologist. The village site is on the left bank of the Brough's Creek on the farm at present owned by Mr. Johnston. There are apparent on the surface three large ash-heaps and eight smaller ones. At the highest point of land behind the village is an ossuary between two pine stumps and a number of single graves leading to it along both sides of the trail that runs through the village site. The site of the village is on high, sandy ground on the left bank of the creek, and occupies a commanding position on the trail from Oro township. Excavations have been made and evidences undoubted of Huron occupation have been recovered in the shape of pottery, stone, axes, clam shells and refuse of the cooking places in the shape of bones and broken mealing stones. This site was visited several times, once accompanied by Mr. Boyle, who identified nearly, if not all, of the traces mentioned by this memo. Bone beads are marked, pipe-heads and beaver teeth and a single bear's tooth found in an excavation, this was accompanied by a bone needle or bodkin about five inches long, and a flared mouth clay pipe of an excellent pattern.

Proceeding in a westerly direction from this site along the town line, between Oro and Orillia, the next site come to is on the farm of Miss Annie Strathearn, lately owned by her father, Mr. David Strathearn, and listed as site No. XII (Hunter). On the west half of lot number 10, con. 1, South Orillia. This village is situated directly on the trail leading from the village on the farm of Robert Anderson, in the township of Oro, toward the centre metropolis at Orillia town. On this site there are three well defined ash heaps close to the spring of water never failing. This site is not different from the others, as it is on well drained, sandy soil, having a southern exposure, the land rising to the back of the site and being rocky on the summit of the trail, the trail being very perceptible. In the ash heaps have been recovered the usual remains, pottery, pipe heads, and a mealing stone near the village site. On this site the ash heaps are two on the west side and one on the east side of the trail. At least two iron axes have been found here, one of which is in the writer's possession. This village was in the nature of a guard vil-

lage to the trail, and distant from the Anderson village about five hundred yards, and about a half of a mile from the next site, that on the farm of Mr. William Harvie, listed as site XI.

Proceeding from the last site along the town line between Oro and Orillia the next site is found on the farm of Charles H. Rowe, being the west half of lot 5, con. 1, South Orillia. This site has been partially explored. There are two ossuaries on the fence line next to the woods; I visited this site accompanied by Mr. Boyle, who identified the ossuaries, this site is easily defensible, having a deep ravine on the west towards Bass Lake and a hill sloping at the back rising from the ossuaries about three hundred yards to the highest point. There is a dense swamp beyond the ravine reaching to Bass Lake. These bone pits are distant from the town line about two



hundred yards, and possibly are in connection with the Coleman village site just across the road in Oro township. This site is a new one, and can be listed as site number XXIII., South Orillia.

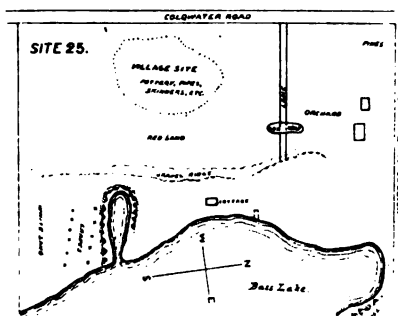
As the town line a short distance from the last site runs into the waters of Bass Lake we will journey back to the place where the Orillia to Barrie road turns off and go north to the farm of William Harvie, on the east half of lot 9, con. 1, South Orillia. This site is on the trail from the Strathearn site, and is about four acres in extent, ashbeds, and numerous large quantities of pottery being found in the past. This site appears in last year's report as site No. XI.

The next site is to be found on the farm of John R. Harvie, being lot 6, in the 1st concession, South Orillia, this is a new site and can be listed as No. XXIV., South Orillia. On this site there are single graves with traces of living places, though these are nearly all destroyed, as the farm is in a high state of cultivation. Visited this site, accompanied by Mr. Boyle, who obtained for the museum two specimens of stone axes, one diorite and one Huronian slate. The graves are in the field to the west of the house, and are on the fence line between two fields, the bodies being in a recumbent position, feet to the east. This site is close to Bass Lake.

Proceeding still in a westerly direction along the concession line we reach the waters of Bass Lake, around which are scattered numer-

ous sites, the first of which is listed as site IV., adjoining this site and, possibly, forming a portion of it, is a small site on the land of Mr. William Forbes, being the part of the southwest half of lot 3, con. 2, South Orillia. There is an ashheap in the lane leading to the lake from the Coldwater road trail 48 feet long, 16 feet wide, and about three feet deep, this lies E-NE. to E. by compass, and is distant 500 feet from the road line. In the field to the west there is a village site, and ash heaps are numerous, pottery, pipes and skimmers are plentiful on the high ground near the shore of the lake, and southwest of the village site in connection, the soil is sandy, and on a high tongue of land. This site is new, and can be listed as site No. XXV.

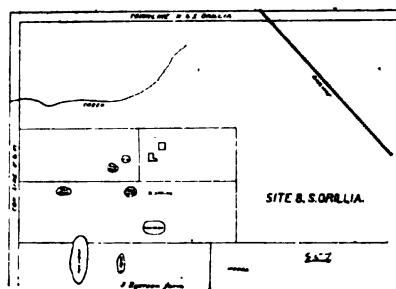
On the high ground, near the shore of the lake and southeast of the site, is the burial ground in connection with the village just mentioned.



Immediately to the south and west of last mentioned site is site No. III., again proceeding in a southeasterly direction we reach site No. II. Visited this site accompanied by Mr. Boyle who obtained for the museum some valuable stone specimens. Immediately across the road and in the township of Oro is site listed No. XXXIII. for the township of Oro, and is situated as described. Mr. Boyle obtained for the museum a beautifully marked gouge stone axe of large size, and other stone implements.

Returning to Orillia, and making a fresh departure in a northerly and westerly direction, the first site met with is that on the farm of Mr. Jesse Ryerson, B.A. On this site there are at least two ash heaps running in an E.NE. direction, one of which is very large and wide. The owner's son has made quite a collection of broken pipe-heads, pottery, bone and stone implements. Went over this site with Mr. Boyle, and he found a broken whorl stone pierced, and two others in process of manufacture, these latter now being in the writer's possession. This site is in immediate connection with that on the farm of Mrs. McPhee, listed as site No. VIII. In addition to that already written of this site the following information may be of value. Soil of village site is sandy, sloping in a westerly direction to spring creek, and having a spring to the northwest on the site. Beads plentiful, being brown runtee and French mottled, about a half a mile from Silver Creek, separated therefrom by a high white sand hill to the north and west. Site occupies about seven to eight acres, and has five large circular ash heaps as shown on the accompanying plan. Three of the ash heaps

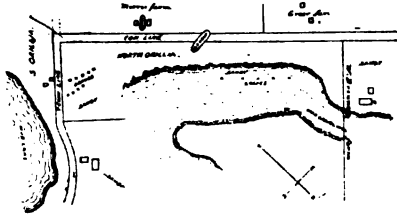
have been measured, and are 18 paces, 15 paces and 17 paces in diameter, and raised about two feet above the surrounding field. Mr. Boyle obtained for the Provincial Museum a small collection of Indian and French beads, bone arrow points, soap stone pipe, flint and brass arrow heads and deer horn pipe, having two holes therein. In the field to the west are the remains of two more ash heaps. As this field has not yet been broken up no measurements were taken. It is supposed that the grave yard in connection with this village is on the next lot, being referred to herein, as site XV., North Orillia, and is a new site not listed. We measured this site, and I give measurements as found. Ash heap in northeast corner of field, 55 feet in diameter; ash heap in southwest corner of field, 52 feet in diameter; and the ash heap in the northwest corner of field, 42 feet in diameter, from this heap the Ryerson ash heaps lie south by compass in the next field.



Proceeding from the last site in a westerly direction along the concession line across the town line the first lot on the right is that owned by the township of Orillia as a sandpit. On the crown of the hill, and lying on the travelled road, is an ash heap of about forty or fifty feet in length, while on the bench above the road is a grave ground. On this same lot, but up the town line in a northerly direction from the concession line, is another collection of single graves. These are just across the road from the house of John Hughes, but on the township lot, and are on the same bench of white sand referred to above. This site is close to Mud Lake, and, possibly, is in connection with the McPhee site and the Greer site, as it is equi-distant from each of these. Has not been listed, site XVII., North Orillia.

On the farm of Joseph E. Morris, on the right side of the road, and to the east of the Greer farm, is another site, and ash beds are numerous. The owner informed me that there was one that was four feet deep just under the edge of his barn, he has found quite a large quantity of pottery, broken pipes, and remains of Huron village sites, this lot has never been listed, and can be placed as site XVI., North Orillia, being part of the east half of lot five in the first concession of North Orillia. This site has a southerly exposure, and is on the edge of the white sand hill referred to in the previous site, but nearer to Silver Creek an affluent of the North River. The ash heap is a long one, not circular as on the McPhee site, possibly of the same system as that already described as lying on the road bed in the last site.

Proceeding in a northerly direction along the concession line the next farm is that occupied by William S. Brennan, being the west half of lot 2, concession 6, North Orillia, listed as site XI. In addition to the information already given of this site there is a small grave ground in connection with the ash heaps back from



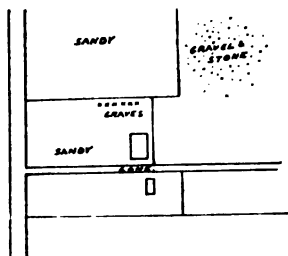
the road on the bench of white sand running parallel to the road line, with a few graves perceptible. The number of the lot was given wrongly by the writer to Mr. Hunter through ignorance prior to the last report, and is as above, not as printed in last year's report.

Still proceeding in a northerly direction along the concession line to the next farm, namely, that owned by Eliphalet A. Brennan, being the west half of lot 3, in the 6th concession in North Orillia. On this farm will be found in the field to the west of the barn a few graves on the rising ground. All of the bodies are lying in a



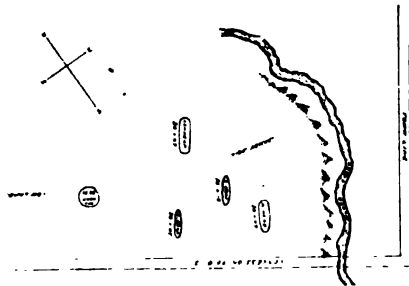
southwesterly to northeasterly direction, on their backs, not doubled up, with the head to the southerly side. No traces of ash heaps on this farm so far as known, there are at least six full grown persons buried in this plot of ground. The soil is sandy, and has a southerly exposure, and slopes rapidly to Silver Creek.

The above is a new site, and can be listed as site No. XVIII., North Orillia. Just across the road from the last site and on both sides of Silver Creek lies the farm of the Quinn estate. On this site is a large village site, and burial ground. Sufficient has been done



to identify this site, but requires more search to make a map of it. This is new, and can be listed as site No. XIX, North Orillia. This lot is numbered 3 in the 5th concession in North Orillia.

Returning towards the town of Orillia the next lot is that of Mr. Geo. Greer, namely, the southeast quarter, lot 2, con. 5, North Orillia. On this site are found iron and stone and clay implements and was apparently quite a large village site. Mr. Boyle obtained here some very interesting clay pipe specimens, one a perfect eagle pipe, and a soap-stone pipe. The owner, Mr. Greer, was very kind, and accompanied Mr. Boyle to the next site visited, that on the English church lot now held by Mr. Greer under lease, being the site listed as No. IX. 1903 Rep. On this site are three large long ash heaps, and one circular ash heap, of which measurements were taken by Mr. Boyle, and compass directions. This site has apparently had a long occupation by the aborigines, as the ash heaps are very distinct, notwithstanding that the field has been in a high state of cultivation for a long time. The writer has gone over this site several times and verified measurements, beginning at the ash heap on the southeast side of the lot, the sizes are as follows: ash heap No. 1, 47 feet long, 30 feet wide; ash heap to the west, 45 feet long, 30 feet wide; ash heap to the northeast, 30 feet by 18 feet; ash heap to the northwest, 47 feet by 30 feet. To the west of these ash heaps there is a circular ash heap 33 feet in diameter.



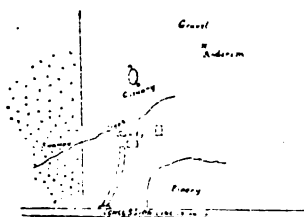
From the last site proceeding in a westerly direction along the concession line the next farm is that listed as No. VIII., and owned by Mr. A. Fyfe. Mr. Boyle obtained for the Provincial Museum four pipes and a couple of clay beads that are rare. At the back of the farm there is an excavation, doubtless, prepared for an ossuary, though not used by the Hurons, it is about twenty feet across, and about six feet deep, in white sand, and has growing in the middle of the pit a large tree.

Across the road from the last mentioned site is the farm of Mr. John Ego on which is an ossuary now rifled of its contents, and back from the ossuary in the bush is a single grave with a pine slab at its head, marked "Anderson".

Referring again to the report of 1903, in the report reference has been made to Chief's Island as site No. X., and certain finds have been listed as coming from this place. These articles were obtained from the grave on the northeast end of Horse Island, being that of the brother of the late Chief Yellowhead, James Yellowhead. This island is now the property of Lawrence Heyden, of Toronto, and he has had the grave protected from vandalism. As the site is new, and not one of the Hurons, but of the Ojibwas, as the site of Chief's Island undoubtedly is, perhaps it will be well not to list same. The graves

on Chief's Island are all Ojibwa with one exception, that of the missionaries' wife, and are intact. This island is now and has been the possession of the Yellowheads, the hereditary chiefs of the Rama band of Indians, they have never lived on the island, nor have any other Indians in living memory, as this ground is to them sacred.

At the Narrows to the west of and south of the site No. XXI. there is on the extreme point of land on the old Oak Orchard a number of burials, and these bodies can be found under and near the flagpole in front of the residence of the late Albert Fowlie, P.L.S. As this site is new, or, rather, an extension of the site No. XXI, it is well worthy of noting. Arrow points are numerous here, stone and bone. The ground is high and sandy back from the shore of Lake Simcoe, where the burials are. Returning to the town of Orillia, the plot of land bounded by Colborne, Wyandot and Albert streets, and the Barrie road, will yield rich finds to the archæologist, as it has all been buried over by the Hurons, and the remains from time to time are unearthed and reburied. This site has not been listed, and is new and can be listed as site No. XXVI. On the lot to the west and south of Samuel Warren's residence there are a number of burials, and to the back of this site and a couple of hundred yards away is a never failing spring creek flowing from the Mount Slaven site.



On the crown of the hill on the site of the stores of Geo. Vick & Sons, Mississauga street, have been found a number of Indian remains in the years gone by. Mrs. Vick has in her possession a small pot found here while excavations were going on. Immediately to the back of this site or portion of site stood the old northwest trading house on the crown of the hill on the land owned by Mr. Vennor, afterwards used as a mission house while the Indians were here prior to 1836, when they were moved to their present location in the township of Rama by Sir John Colborne. This plot is in touch with the old Narrows trail from Medonte, and is on the north side of the trail.

The soil is sandy white and well drained, as is usually found, and is distant about three hundred yards from the shore of Lake Couchiching.

On part of lot two O.M.B., town of Orillia, nearly opposite the roller mill of Geo. Vick & Sons, a body of one of the defunct aborigines was found in August 1st, and measurements taken of the body, the skull being forwarded to the museum. The measurements are as follows: Length of body from first cervical vertebra to heel, 6 ft. 4 in., depth of body in earth, 2 ft. 6 in., lying feet to the east by compass, on back, hands crossed in front of plevis, the feet lie 74 ft. 8 in. from street line, on the west side of the lot, and about two hun-

dred feet from the old water line of Lake Couchiching. On the town park between two trees is the body of another of the Hurons, this was raised some time ago and reburied by the order of the authorities, and was the body of a young person from 18 to 25 years old, by the estimation of the medical gentleman who saw as to the disposal of the remains. On the hill on the north point of the park is another burial, this has also remained untouched by order of the town.

Now taking the wide range of burial from the railway to the south, to the north point of the park to the north, place it in connection with the Mount Slaven site, as it undoubtedly was and is, one can easily imagine an immense population at this point of the Huron country.

The trails all centre here, the water communication is good, the soil sandy, the water supply good, hence after eliminating all other sites less able to fill the bill, one can easily say that the site of Cahia-gue or Kontarea, or St. Jean Baptiste Mission of the Hurons was here.

On the lot of land owned by Geo. W. Reeve, of the town of Orillia, being the south 6 acres of the centre 25 acres of the west quarter lot 7, in the 4th concession of South Orillia, is an immense ash heap guarding the Coldwater road trail, and is over 80 feet long, 16 feet wide, and very deep, lies east and west by compass. This site is on the crown of the Algonkin shore line, and has never been listed, and can be placed as site No. XXVII., South Orillia. To the south and west along the Coldwater trail to the corner of the concession there have been found large quantities of stone, iron and bone implements, and pottery fragments.

Going in a northerly direction from the last site along the highlands to the farm lately owned by William Calverley, Esq., J.P. On this farm have been found large quantities of iron axes and pottery fragments. This site is new, and has not been listed, and can be placed as No. XXVIII., South Orillia, and is situated on lot east half of lot 6, in the 4th concession, South Orillia.

Going still in a northerly direction from the last site to the farm of Albert Lehman, being the part of B. L. 5, in the 6th concession, South Orillia. On this lot is a small ash heap situated on the shore of the lake, and commands a view of the town of Orillia, the Narrows, and the islands of the Lake Couchiching, and was apparently a guard house on the shore of the lake. This site is in the orchard to the northeast of the house, and is almost obliterated by cultivation. Broken pottery is plentiful here. The owner has in his possession a number of black stone skinners or axes found here, and a couple of arrow points, flint or chert, one large spear point stone. This site is new, and can be listed as site No. XXIX., South Orillia.

LAKE ST. GEORGE.

During the summer of 1897 a very cursory examination was made of the peculiar embankment that forms an almost complete enclosure of this lakelet.* This was in the year following the identification of the Otonabee serpent mound on Rice Lake, and when quite

*Annual Archaeological Report for 1897-8, p. 44

a few correspondents in various parts of the province directed the attention of the curator to what they regarded as possible or probable structures of a similar kind.

No conclusion having been reached at that time respecting the origin of the bank surrounding this body of water which covers about a hundred acres, it was thought well to spend a few more hours in going over the ground last summer, when, in company with Mr. J. H. Hammond we were making a pretty thorough examination of many recently discovered, and some formerly known Indian localities in the township of Orillia. We were accompanied by Messrs. Wm. O. Black and J. P. Secord, the former because from long residence in the vicinity, he knew every foot of the ground in the woods as well as in the open, and the latter because he not only first directed attention to the embankment as a probable serpentine structure, but because he desired to point out what he regarded as identifying details. He and Mr. Hammond used spade and shovel manfully near where the head with open jaws and enclosed egg were supposed by Mr. Secord to be, but they did not succeed in convincing themselves that the proof was very good.

While they were thus employed Mr. Black engaged himself in tracing by ear and by sight the underground outlet of the lake to its mouth on the shore of Lake Couchiching, and in accompanying me to examine the formation of the elevated, eastern shore line in the bush, where it is much lower, and less regular than at any other point. Indeed, for about two hundred feet here, there is no bank at all. We left the place in quite as much doubt as when we reached it, and I feel convinced that it would prove educationally advantageous to have the opinion of a geological expert respecting the formation of this very remarkable circum-lacustrine barrier.

As the interested reader may not have an opportunity to refer to the brief account of this embankment in the report for 1897-8, now out for print, it will be pardonable to quote a few descriptive sentences from it.

"Here, undoubtedly, we† found a bank of very artificial looking formation, and we decided to follow it round the lake in a general way at first, and afterwards to make some examinations in detail, if such should be thought desirable. We thus found the ridge to vary in width from nine or ten to thirty-eight feet. At the eastern end, for a distance of a hundred and ninety-two feet, there is no ridge whatever. South of this gap the slope of the ground is to the outside only. On the southwest side there is a portion that is not more than ten feet wide, and two and a half feet high, on the outside of which lie several granite boulders, and a little further westwards there are numerous similar stones in the bank itself. A little west of south, the ridge widens to thirty feet, and rises to three and a half, the outside being higher than the inside.

On the south there is an elevation about twelve feet high, between which and the ridge proper there is a trough two hundred feet long, and two and a half feet deep, and at intervals along both elevations boulders appear. In walking over the whole of the bank we found

* Annual Archæological Report for 1897-7, p. 44.

†Mr. Hale, junior, of Orillia, was present at this time, and was of great assistance.

it to be within from twenty to fifty feet of the water, except at the west end where the distance between the two must be nearly a hundred yards, the intervening space being mostly a bare bed of limestone."

THE CAHOKIA, OR MONK'S MOUND.

Having been commissioned by the Honorable, the Minister of Education to attend the International Congress of Arts and Science at St. Louis, I was thus afforded an opportunity of seeing what is said to be the largest earthwork in the United States, commonly known, in books, as the Cahokia mound, but locally known as Monk's Mound. The latter name has been given to it on the supposition that a small body of Trappists settled in the vicinity in 1810, and occupied the summit of this mound as a domicile. This is now said to be an error, although it seems quite certain that these monks did make use of some smaller mounds for domestic purposes. The former name is also a misnomer, for, according to Professor Putnam "there is not the slightest evidence that the Cahokias, of the time of La Salle, were the builders of this or of other mounds in the vicinity."

This earthwork is the largest of a group numbering nearly seventy on what is known as the American Bottom, and is situated some six or seven miles northeast of East St. Louis, in Illinois. It is said to cover sixteen acres of ground, its greatest dimensions being 1,080 feet from north to south, and 710 feet from east to west, while its height is stated to be one hundred feet. Seen from either the eastern or western side it shows distinctly two terraces.* It has been described as a truncated, rectangular pyramid, but whatever it may have been, there is little about it at present time showing any regularity of form.

It is somewhat difficult to make oneself believe that so huge a piece of work, simple as its structure is, can be the result of human effort, and one begins to incline to a conviction that it is, only when he sees the evidences of workmanship on its terraced sides. I was informed by Mr. John Monteath, a resident of St. Louis, who kindly accompanied me, that when the water of the Mississippi rises thirty-two feet above its normal level, the American Bottom is all submerged, so that these terraces suggest Babel-like attempts to provide a place of retreat during periods of high water, and we must take into account that in former times the Mississippi, in common with every other North American river, rose much higher, and remained longer in flood than at the present time when so much of the forest has been cut down, and so many obstructions to currents have been removed. From this point of view the lowest terrace on the south side forming nearly one quarter of the area of the whole mound may have been found too low when the water was unusually high. The second, in this case, would have been constructed to meet such an emergency, and what is called the third terrace, at the northeast angle, is probably only a part of the second, where the work has been carried on a little further, or it may be the beginning of a third.

*Most writers who refer to this mound speak of a third terrace. To my eye no such elevation was perceptible.

From the southern face of the lowest terraces, and some distance east of the centre, there exists what may be regarded as having been at one time a roadway from the lower field-level. I am not aware that any thorough examination has been made, so far as the interior of this earthwork is concerned, but on the fields all around this and the neighboring mounds our little party, consisting of Mr. and Miss Monteath, and myself, were able to pick up numerous chips of chert and some fragments of pottery, the former being the result of work done on material brought from the great Flint Ridge of Kentucky.

RUPERT'S LAND INDIANS IN THE OLDEN TIME.*

BY JAMES STEWART.

[The following paper by Mr. James Stewart, (now well advanced in years and residing at Prince Albert, Saskatchewan) was forwarded to us by Mr. Basil G. Hamilton, of the Canadian Pacific Railway Co., Calgary, Alberta.

Mr. Stewart's story is exceedingly interesting, ethnologically, and proves the writer to be a man of unusually excellent observing power, as well as one possessed of good narrative qualities, with a dash of humor.

The whole paper bears the impress of originality, relating as it does to phases of belief and custom among a people of whom comparatively little has been written, viz., those in Manitoba and the territory adjoining to the east in what is now the district of Rainy River, Ontario.

Mr. Stewart was in the service of the Hudson's Bay Company.

For the information of younger readers it may be stated that Rupert's Land was the former name of our North West Territories, including what we now call Manitoba.]

Now being fairly ensconced among the uncivilized Indians around the shores of Lake Winnipeg, I will endeavor to describe their religion, their superstitions and social habits as they were observed about forty years ago.† The tribe of Indians that was under the surveillance of the Hudson's Bay Company's post at Beren's river went under the name of the Bungays, a name I have not heard of in any other part of the country. Their language was a dialect between the Cree and the Chippewa, both tongues being understood by them. At the time I am writing these Indians knew nothing whatever of the christian religion, they might have heard of it from their brethern at Norway House, but were utterly ignorant of its meaning. The Indians at Norway House who were converted to the christian religion were mostly Crees, as I have said, a shade different from the Bungays of Beren's river. They had hardly anything in common, and did not have much intercourse with each other, except it might be when the men worked together in the company's boats going and returning to York Factory.

Their religion was not monotheistic by any means, for they had "gods many and lords many." Of course, there were two principal ones, namely, Geeche Manitou, the Great Spirit, and Matche Manitou, the Evil Spirit; but there was a set of underlings, as it were, too numerous to mention, for everything in nature almost, both animate and inanimate, had its presiding deity. Every kind of

*Rupert's Land included what now forms the greater portion of New Ontario.

†This was written some twenty or thirty years ago.

beast, bird and even fish, had its attendant spirit. And then the four winds of the heavens were so many spirits, the sun, moon, and stars, the clouds, lightning and thunder, had each its spirit, all of which influenced the lives of the poor Indian. It may be well supposed that with such a multitude of divinities in their sacred catalogue, superstition would be rampant, which was the case. Many of these superstitions were, no doubt, sad to contemplate, while others of them were comical in the extreme.

With regard to the two principal divinities, *Geeche Manitou* and *Matche Manitou*, the Indians worship the latter as well as the former. According to their belief the Great Spirit is certainly the Supreme Ruler of all things, even over *Matche Manitou*, the Evil Spirit; but he is more particularly the tutelary deity of the white man, and is too highly exalted to take any interest in the poor Indian. Furthermore, as he is the personification of goodness itself, and will not willingly injure any poor Indian unless he wantonly tries to do harm to the white man, these people thought there was no necessity for propitiating the favor of such a harmless being; therefore, they set him aside as one from whom they had nothing to fear. But *Matche Manitou*, the Evil Spirit, being, not an imp of the devil, but, the devil himself, was the object to be dreaded, whose favor they ought to endeavor to obtain, and whose wrath they ought to endeavor to conciliate to the best of their ability. But still, after all, according to their belief, he was not such a malignant personage as our theologians would paint him. He could, by repeated supplications and offerings, be persuaded to do a good turn to his suppliants occasionally. Hence there was a kind of half friendly feeling towards his Satanic Majesty among the Indians, which I can hardly blame them for. Even among the clergymen of my own Scottish home a kind of sympathetic feeling is exhibited for his brimstone Majesty. For instance, a Scottish clergyman, in winding up his prayer, presented the following petition: "And noo, O Lord, if it be thy will, dae thou hae mercy on the *puir deil*, an' a' the praise and glory shall be thine, Amen."

The next deity of importance in Indian Mythology is *Wesseke-Jack*,* a sort of gentleman-foreman-god, whose business seems to have been to superintend and direct the work of creation, and oversee things in general afterwards.

In the work of creation, having first made the trees and herbs of the field, he next turned his hand to make all the mammals, reptiles, fowl, and fish; but at that time there was a great scarcity of light upon the earth, the sun being only an occasional visitor to this globe. Anxious to keep the sun from wandering away on his next approach to the earth *Weese-ke-jack* set an enormous trap to catch him, something like a gigantic bear-trap. This accomplished the desired end, for the very next time the sun came near the earth he became caught in the trap. In vain he struggled to get free; the cords by which he was held were too strong for him. But

*In the mouth of the white man this becomes *Whiskey Jack*. This name is now given to the Canada Jay, or, as the lumbermen call it, the meat-bird (*Perisotus canadensis*) which seldom comes south of Muskoka. In the fall of 1904 they appeared in Toronto, in large numbers.—D. B.

the proximity of the sun to the earth and its inhabitants was highly dangerous, the heat being so great that everything animate or inanimate was in danger of being scorched. The spirit of the sun knew nothing of this, however, therefore, Wesse-ke-jack concluded to drive some sort of compromise with the sun, before he would consent to give him his liberty. After a long confabulation between him and the spirit of the sun, whose name was Aneneke, it was stipulated that the orb was to come near the outer edges of the earth only in the mornings and the evenings, and, during the day, to keep at a respectful distance, just near enough to warm the earth without scorching it. On the other hand Kee-wa-tin, the spirit of the north wind, was ordered by Wesse-ke-jack to keep at a respectful distance from the sun when the days were long, so as not to counteract the effects of his beneficial warmth. But during the short days of the year, Kee-wa-tin was permitted to blow upon the earth and bring snow and ice in its train so that the bear, the frogs, etc., might enjoy their winter sleep without molestation. On these conditions, which were mutually agreed upon, the sun was to get his liberty.

But now another difficulty presented itself. The sun had not the power to loose the bands by which he was held, and the heat emanating from him prevented either Wesse-ke-jack or any of his creatures from approaching the sun to cut his bands and set him free. Wesse-ke-jack made a proclamation among his creatures that any of them that would set the sun free would receive particular favors from high quarters.

The beaver at that time was a sort of insignificant fellow not much thought of by the rest of the animal world, having only a few small teeth in his head, and having hardly any caudal appendage like the rest of the animals, his tail being only a small stump about two or three inches long. Yet, withal, he was about as conceited as a Dutch Editor. . . . He, therefore, walked boldly up to headquarters, and offered to release the sun. At first Wesse-ke-jack looked upon the beaver with the same misgivings that Saul looked on David when he offered to go out and fight the Philistine; but, being assured by Mr. Beaver that he would perform the task, he was permitted to go. The beaver set off at full trot, and succeeded in gnawing through the cords which held the sun without being quite roasted alive. The cords being cut, the sun arose majestically from the earth as a large balloon, when the ropes which attach it to the earth are let go.

But was not the poor beaver a pitiful sight when he presented himself to Wesse-ke-jack on his return? His teeth were burned away so that only two or three blackened stumps remained; his hair which formerly represented that of the swine,* was burned off, leaving only his blackened skin. Altogether he was an object of pity. But Wesse-ke-jack, in gratitude for his deliverance from the burning rays of the sun, proceeded to reward Mr. Beaver in a princely manner. He, in place of the rough, hairy coat he had previously, was clothed by Wesse-ke-jack with a beautiful soft coat of fur which was the envy of all the other animals; and to compensate for the loss of his teeth he was furnished with a new set, broad and sharp, admirably fitted to cut down trees. But in order that it

*A recent addition or change. The pig is not indigenous in America.

should be kept in remembrance whence he derived these favors his teeth were made of a brown color as if they had been scorched by fire. And this is how the beaver came by his chisel-like teeth, and furry coat.

Wesse-ke-jack having thus settled the sun, and the general temperature of the earth, now proceeded to make man. In order that man might be made good and strong, Wesse-ke-jack concluded to make him of stone. Having picked out a rock that suited his purpose he spent many days in hewing out the figure he wished to make; the stone being very hard and his tools none of the best. After working for a long time, however, he managed to get the figure of a man made that suited his purpose. Wesse-ke-jack was so proud of his workmanship that he, after setting his man of stone upon his feet, before putting life into him, walked backwards to see how his man would look from a remote point of view. When he had thus walked a goodly distance from his object of admiration, he stood gazing for a long time in silent contemplation and satisfaction with the complete job he had accomplished. But, while thus employed, a malicious bear happened to peep out of his hole, and espied the figure as it stood in all its grandeur. Filled with envy he rushed up to the newly made man, and, like a pig against a stone wall, began to root viciously against the model man. The consequence was that before Wesse-ke-jack could interfere, Mr. Bruin had knocked the man over, who, falling upon the hard rock, broke into a hundred pieces.

Wesse-ke-jack was terribly enraged that by this untoward accident his great work was thus destroyed. For a time he would neither eat nor sleep, being so grieved at the disastrous end his many months of work had come to. However, he determined to make another attempt to form a man, but concluded he would not spend so much time over it this time. He set to work to make one of clay, and in a little time had one nicely made which, after setting in a secluded place, he left it to dry in the sun. This being done satisfactorily he endued him with life, and thus we have man as he is at the present day; but the Indians still lament the untoward accident by which the man of stone was destroyed, as had Wesse-ke-jack succeeded in putting life in the man of stone, the human family would have been ten times stronger than they are now.

But in process of time Wesse-ke-jack found he had an unruly family to deal with. All the creatures of creation began to prey upon each other. Loud complaints were made against the fox because he attacked the birds and killed them; the fish complained against the otter for the same thing; while the bear set up a dismal groaning because the winter was so long he could get no berries to eat. But the greatest complaint was made against man because he ate everything that came in his way; beasts, fowl, fish, and berries were all devoured by this creature. The clamor of all these lower animals became so great that Wesse-ke-jack determined to call a general council to see whether he could not bring order out of chaos, and reach some agreement by which all these grievances would be remedied. Accordingly, a general proclamation was issued summoning all spirits of the various living creatures before him at a certain date.

When the time arrived there was a mixed multitude convened,

which proved to be of a very unruly set. The noise and confusion were something terrible, which Wesse-ke-jack, with all his skill, could not control. In vain he tried to get the crowd to keep still and listen to reason, there was no end to the continued noise they were making.

Wesse-ke-jack finally lost his temper, and became very wrathful. The most noisy one in the crowd was the frog, which, in spite of all that could be done, kept up an incessant chattering and croaking. Wesse-ke-jack got so enraged at the cheek of Mr. Frog that he dashed some glue over the mouth of the frog with the hope of stopping its chattering forever. But this was of no avail, the frog blew the glue out, but part of it remained around the corners of his mouth, which is the cause of the white streak there to this day.

But nothing could be done to allay the storm and tumult of this convention. Wesse-ke-jack, therefore, dismissed them all, vowing vengeance on the whole pack of them.

His next exploit was to build an immense canoe, into which he took a pair of every kind of living creatures, intending to drown all the rest. Accordingly, when he had all his cargo aboard, he stepped into the canoe, and, forthwith, the whole earth sank beneath the water, causing the death of all living creatures, with the exception of those who were with Wesse-ke-jack in the canoe.

This state of affairs continued for some time, Wesse-ke-jack, with his living freight, went cruising about on the waste of waters for many a long day, until at last he became tired of that kind of life, and, forthwith, decided to make a new earth. But, in order to do so, he must have something to make it of. He, therefore, commissioned the otter to go down into the waters and bring him up some mud, so that he might make a new earth. But once the otter got back into his native element, and finding fish plentiful, he never returned to his master with the mud.

Wesse-ke-jack, finding the otter did not return, sent Mr. Muskrat down to bring him some mud. Now at that time muskrats' tails were very short, and only small affairs. Mr. Muskrat went down as directed and gathered a goodly armful of mud and straightway came to the surface of the water, but when Wesse-ke-jack put forth his hand to take the mud the muskrat, with a twinkle in his eye, and a roguish smile on his face, as much as to say, "catch me if you can," made a swift turn and dived under the water. Wesse-ke-jack made a grab for his ratship, but only succeeded in catching his stump of a tail, which stretched out and slipped through his hand, and the rat got away. But since that time the rat has had a long slim tail, which is neither useful or ornamental.

Wesse-ke-jack, being thus twice thwarted, was highly indignant, and threatened all sorts of vengeance against the otter and muskrat. Having cooled down a little he asked the beaver to go and get him some mud. Accordingly, the beaver went down to the bottom and brought from there quite a large handful of mud which he handed gracefully to his master, who was quite delighted, and he straightway made a new earth. Everything being finished, he caused the living part of his cargo to land and enjoy themselves as best they could. But he did not forget Mr. Beaver for his services. He,

instead of the stump of a tail he formerly had, received a broad, flat trowel-like tail with which he could plaster his house.*

While speaking of the Indians, their habits and mythology, I may make mention of one of their festivals at which I had the good fortune to be present.

This festival is usually held in the spring of the year. It is, I was led to understand, the most important of all their religious ceremonies. Their code of religious duties is contained in the precepts laid down by the chief master of ceremonies. It is a sort of secret society which has lodges all over the country from Lake Superior to the far north.

The name of the feast is "Metawin" or "feast of long life." The head-centre lodge, or tent, was established in the east by some of the divinities. I was not able to learn which, but its sole purpose was to insure long life to all those Indians who obey its behests, and to grant remission of sins to all Indians who follow its precepts. The centre lodge remains in the east, and its exact locality cannot now be found, but on account of the migration of the Indians, they received power and instructions to establish subordinate lodges.

The first subordinate lodge was established, it is said, by medicine† men, somewhere in the vicinity of Lake Winnipeg (Superior?) five or six hundred years ago. Its mysteries were ordered to be performed every alternate year, forever, and from this lodge the several tribes of Indians in North America received their power to institute branch lodges.

Each lodge had its Grand Master of Medicine, a Master of Ceremonies, and other minor officers. Each member of the lodge had in his possession the bag of life. This bag consisted of the skin of a certain bird or animal, such as the skin of a beaver, owl, mink or muskrat. Sometimes they were made of the skins of snakes, in fact, almost any kind of small skin was used.

These bags of life were highly ornamented with beads or porcupine quills, and contained medicine of the most select kind.

The Metawin tent of life was long and narrow, with its doors, in all cases, facing the east and south, and carefully covered with leaves so close that the eye of the outside observer could not see into its mysteries, and thus pollute its sacred precincts.

Through the intercession of Mr. Cummings, and a liberal quantity of tobacco, tea and sugar from myself, I was permitted to enter this sacred place. The chief, who was my conductor, led me into the tent, into which we were no sooner entered than we were saluted with the beating of drums, and a salutation which sounded something like, "Ne Kau, Kau nah, Ka na nah."

The chief led me to the centre of the tent, where stood the wooden images of the goose, the duck and the fox, and some other deities which I did not at that time notice. Here I was told to deposit my offerings of tobacco, tea and sugar, which I did, amid the tomtom of the drum, and exclamations of approval from the Indians.

I must confess that at the time I had serious misgivings whether I was not committing a sin by making an offering unto idols, but

*There are many variants of this story among the Ojibwas. Nanaboosh usually takes the place of Wesse-ki-jack.

†"Medicine" as applied to Indians of this class, is a corruption of Metawin, the feast of long life.

as I did not intend it as an act of worship, but merely did so in pursuit of knowledge, my conscience was quieted on that occasion.

After this ceremony was performed I was set down at the end of the tent near where the chief men were assembled, when I was treated to a dish of boiled sturgeon, being very glad it was sturgeon instead of boiled dog, of which I saw plenty around me.

The ceremony of my reception and partaking of the food being over, I now had leisure to see where I was, and what my surroundings were. As I have said before, the tent was long and somewhat narrow, with several poles stuck in a straight line down the centre, which supported a cord on which were suspended offerings made by those penitent sinners who came to obtain pardon for their misdeeds, as also the offerings of those who had made a good hunt during the past winter, and of those who had recovered from some sickness. These offerings consisted of various articles, such as pieces of printed calico, clothing, guns, knives, ammunition and other things. At the foot of each pole were placed roughly-made wooden images of various birds and other animals, while at the head of the tent, where the chief men sat, was a sort of image representing a human form, partly of wood and partly of clothing, which, I was informed, was the god of medicine. The spectators were seated close around the sides of the tent, sufficient space being left between the assembly and the line of the tent poles in the centre to allow those who performed their religious rites to march around, which was done in a sort of half run, half walk and part dance, and uttering a monotonous chant while the drum at the end of the tent kept up a continual tom-tom.

The origin of this peculiar kind of worship, according to Indian tradition, is as follows: Geeche Manitou, or the Great Spirit, revealed three mysterious ceremonies to man shortly after his creation, about the time the first pair had grandchildren born to them, and before death had entered into the world.

At that time there existed two powerful snakes which had existed from the beginning of the world, the rattlesnake and the natawa. They lived together in harmony for many years, but at length the rattlesnake grew jealous of the powerful and deadly natawa, which envy so increased that the rattlesnake challenged the natawa to try which of them possessed the most deadly poison by inflicting a bite on mankind. The natawa demurred at first, not being willing to disturb the peace and harmony which prevailed in the world, but from day to day the rattlesnake so taunted him with cowardice that the good-natured natawa consented to accept the challenge.

At that period there lived two powerful chieftains near to each other, who were on great terms of intimacy. Each had a son grown up to manhood who loved one another sincerely, and often used to hunt in the woods together. During one of these rambles it came to pass that the rattlesnake and the natawa waylaid them for the purpose of inflicting a wound on each to see which of their poisons was the most deadly. The young men, unconscious of danger, happened to pass the thicket where the two snakes were in ambush, when all of a sudden the two reptiles sprang upon them and gave each of them a sting. The young man who was bitten by the natawa instantly dropped dead from the effects of the poison, while the other had time to run to his father's tent, which, when he had reached,

a noted medicine man applied a powerful antidote to the wound, and he recovered in a few days.

After the deed was done the natawa snake was grieved and enraged at the rattlesnake by whose guile he had been instrumental in bringing death and sorrow to mankind.

"Brother," said the natawa to the rattlesnake, "you have been the cause of bringing death and misery to mankind by your envious and evil designs, therefore, you shall ever after this have a rattle in your tail to warn every being who approaches you of your hateful presence, and the human race shall pursue you to death.

The old chieftain, whose son had died of poison, brought the body home, and with his tribe performed the burial ceremony. Every day the old chieftain repaired to the grave of his beloved son, and mourned his loss bitterly. The friends of the old man endeavored to console him in his grief, but he would not even speak to them.

During one of his daily visits to the grave of his son he saw an enormous snake striped with various colors like a rainbow ascending out of the earth, who thus addressed him: "Old man of the plain, I command you to appear at this spot on the third day following this, and you must implicitly follow my directions and obey my commands. Then shall appear to you a snake on this very spot, he shall be sent by the gods. You will elevate the serpent three times by the horns, and at each time you raise him you shall repeat the words of adoration to the snake by saying "Ne Kau, ne Kau, Ka nah, Ka, Ka, nah. Oh! oh! oh!" Immediately after you have performed, the snake shall appear to you as a manitou of your race, who will teach you the ceremony of the Metawin or the tent of life, and reveal to you the mysterious rites which come from the happy hunting grounds, and from the centre of the earth, and from the depths of the waters. The spirits take pity on your sorrows, and will help you if you obey them. Adieu my son, you will point to the centre of the heavens, the centre of the earth, and to the four abodes of the spirits with your pipe stem, while I slide down the perpendicular rock of our abodes.

At that instant the snake disappeared downwards with a tremendous hissing sound, caused presumably by the rapidity of his descent.

According to the instructions of the great snake the old man repaired to the grave of his son on the third day, and after pointing his pipe stem to the centre of the sky, and the earth, and the four winds, presented the offerings of the dead, then sat down, facing the body of his son, who, according to the Indian custom, was placed in the grave in a sitting posture with his face towards the east. At that instant he heard a rumbling noise, and, lo, an enormous serpent appeared before him, having two horns, and whose jaws contained two rows of large teeth.

The serpent lay down and twisted itself into a circle around the grave. The old chieftain arose from his seat and took the serpent by the horns and elevated it three times, at each time repeating the magic words, "Ne Kau, Kau nah, Ka, Ka, nah." At the third time the serpent changed its shape into that of a venerable old man with white hair, having a rod or wand in his hand, together with the fire bag of life made of the skin of the deadly natawa which contained the magic bead. He thus addressed the old chieftain.

"I have come to comfort and console you for the death of your son. The spirits of the earth, the wind, and the water have seen your sorrow, and I am sent to your race to show you the way of life which you will teach to your children, and which shall continue to the end of time. Now, therefore, light your pipe, and with your stem point to the sky, the abode of the Great Spirit, who shall give you life, to the abode of the spirits of the centre of the earth, whose will is to teach you the virtue of all herbs, and to the four winds who will protect you and give you power and success."

After the old chieftain had completed pointing with his pipe stem to the sky, earth and air, he offered his ghostly visitor the pipe, but the old man raised his wand and touched the mouthpiece, when, immediately, was heard the tapping of a drum. After three knocks of this mysterious sound the old man commenced to repeat the following, "Ne Kains, ne Kains, ne Kains, Kau nah, na ka nah." He then chanted a song, of which the following is a translation:

"I come from the east,
Where the long tent does rest,
The Great Spirit does say,
Perform these rites away."

After chanting this medicine song for some time, the old man sat down near the chieftain, and taught him the ceremonies and rites of the long tent of life, which occupied some days, the Indians say the moon changed once during the time that the old chieftain was receiving his instructions in all the secrets of the tent of life. After the old chieftain had been fully instructed his preceptor said:

"I will bless you with long life, and you shall have more sons, but forget not my instructions. I leave you this bag of natawa skin with the magic bead, and this wand. Beware, pollute not my tent of life. Adieu my son, I go hence, but I shall near you when you chant the mysteries I have taught you." Saying this the white-haired spiritual adviser vanished from the gaze of the old chieftain.

After some months, when the old chieftain's mourning was over, and after celebrating a feast with his tribe, he commanded that all males should assist him in building the long tent of life. During the evenings he employed himself in teaching the males of his tribe to sing the mysteries imparted to him by his spiritual teacher, and after having succeeded in giving them sufficient knowledge in all the rites and ceremonies pertaining to the tent of life, he appointed the various officers to the tent, but he, himself, was Grand Master.

During this time, which took several years to accomplish, the old chief was gladdened by having a son born to him, the very image of the one who died by the sting of the natawa.

The foregoing is the account of the origin of the feast of the natawa,* or, feast of long life, as related by the Indian called Bear-through the interpretation of Mr. Cummings, and now I shall endeavor to give a description of the ceremonies I saw them perform at the feast when I was permitted to be present.

The Grand Master, in giving notice of the meeting, sends a portion of tobacco to all the members of the lodge, with a request to

*He here calls it feast of the natawa for the first time; heretofore it has always been "the feast of the Metawin." In view of its origin it looks as though natawa would be more correct.—B. G. H.

celebrate the feast of the natawa, or long tent of life, which generally takes place about the spring of the year, or in the summer season.

In the first place after meeting, the tent is erected in the form I have described. This being done, the Grand Master and the Master of Ceremonies collect all the members, and approach the tent on the east side, and then march around it three times following the course of the sun.* At the third time around, the Grand Master halts opposite the entrance, and advances three times, essaying to enter, and three times retreats, meanwhile singing as follows:

"I approach but fear
To be near thy presence,
Oh! Oh! Oh! Oh! Oh!

As he finishes this chant the Director of Ceremonies with his wand lifts up the door, and the Grand Master enters, followed by all the members. He then chants the following:

"I have entered, I have entered,
Long life to gain, long life to gain
Oh! Oh! Oh! Oh! Oh!

Then they march around the inside of the tent three times, each in the costume of his order, and each having in his hand his skin bag and magic beads. The members then takes the seats allotted them by the Director of Ceremonies, while the Grand Master takes his stand near the image of the god of medicine with the drum and knocker in his hand. He taps the drum three times at each interval, repeating the words "Ne kan, ne kan, kan na nah, ka na nah." He proceeds to address the company in somewhat the following strains:

"The Great Spirit, who dwelleth in the heavens, bless you all and send you long life. The white haired man brings with him life, and has given me life which I give to all my brothers and sisters. Our forefathers left us this tent to teach our children, and your life depends upon the secrets of your own breasts. Prepare your magic beads and medicine skins of the tent of life, to cast your beads on the sick and dying men who may be placed before you to restore life. Your magic beads shall pierce the rocks, the spirits who preside over our secret councils shall bless your efforts to restore health and long life. The path of our ancestors teaching us the use of countless herbs and roots growing in this our world will sing the song of enchantment, when each member will offer with gratitude to his teacher, the offerings he may have brought with him to speak and receive long life."

The Grand Master, having finished his speech, several other leading members addressed the meeting, and it seemed remarkable to me to notice with what ease and fluency these Indians spoke. There seemed to be no hesitation, no pause to think of a word, and no stammering in any way. Their words seemed to roll out as fast as the speaker could utter them. The tenor of the speeches was about the same, which was to obey their superiors and use the medicine to be found in the world.

The speeches being now ended, the members of the lodge marched around the tent several times, swinging their medicine bags, and

*Presumably keeping the tent to the right.

uttering a monotonous chant, while the drum was kept constantly on the tom-tom.

The candidates for admission into the secrets of the lodge, the preparation of whom I shall speak of hereafter, were seated with the women and children along the sides of the tent, while the procession was going around in a sort of a jog-trot dance. Suddenly the procession would come to a halt opposite one of the candidates. The chief medicine man would mutter something to the candidate, and then throw his medicine bag at him, whereupon the candidate would suddenly drop down as though he had been shot. The medicine men then gathered around in a kneeling posture, and blew* into his ears and mouth, and shook their medicine bag over him, making at the same time a soft rumbling noise. In a short time the candidate would open his eyes, and gradually come to life, as it were, when the march being resumed, the slain man would grasp his medicine bag and follow the procession. The ceremony was repeated until the disposition of all the candidates was completed.

After the ceremony of admitting the candidates is disposed of they begin another, which consists of each medicine man holding a bead in his hand and going around showing it to each of the company. He then falls upon his knees and pretends to swallow it. The medicine men claim that this bead is supernaturally drawn from their bodies and replaced in their medicine bag without having either seen or touched them. After this rite has been gone through the several offerings are taken down and handed to the newly initiated candidates, who, in their turn, distribute them among the medicine men; this division is, however, not done arbitrarily, as the offerings are divided according to provision made in a secret conclave a short time before. This being done, the medicine men again march around the tent at a half trot, and point their medicine bags occasionally at each other, the party pointed at immediately falls down as if struck by lightning, but soon recovers, gets up and follows the crowd. On some occasions they seem as if badly wounded, and unable to rise, in such a case the others gather around him, and, after much ceremony, make a show of extracting a bead from his body. This ceremony to me was very amusing on account of the effect the pointing of a medicine bag had upon one. If it was pointed at the body, the victim suddenly fell down motionless, where he lay as if dead, until the medicine men gathered around him, and by various manipulations brought him to life again. When the medicine bag was pointed at one's knees he would instantly become lame, and would, with great difficulty, hobble after the procession, but after a little while he would gradually get better, and finally resume his wonted jog-trot with the rest.

Most of the women and children were seated around inside of the tent, with the exception of those who were employed in looking on outside, and they were not a few, as there was seemingly no cessation in eating. Some of the women were going to and from the nets which were set in the river for sturgeon. No sooner was a sturgeon-caught than it was brought ashore and cooked immediately.

*For reference to blowing practices for healing (?) purposes, see Ontario Archaeological Report for 1878, p. 141.

There also seemed to be a law that any dog that had the temerity to enter into the sacred tent, was instantly killed, skinned and boiled forthwith. As there were plenty of dogs around, there were quite a few sacrificed.

Several dishes full of dog broth and dog meat, as well as sturgeon, were set before the several wooden images in the tent, which were all divided among the medicine men when the feast was over.

About six o'clock in the evening the ceremony was ended, and I returned to the fort. There was a great deal of juggling in these ceremonies, which, although some of it may be classed as very strange, yet, I had no thought but that the whole performance which seemed so strange was done by sleight of hand.

MORTUARY CUSTOMS IN BRITISH COLUMBIA.

By REV. R. W. LARGE, M.D., C.M.

The dead were placed in boxes in a sitting posture, the knees drawn up, and the head pressed down somewhat. These boxes were, by some of the natives (particularly those about Fort Rupert) placed in trees, being laid across branches close to the trunk. Several boxes might be placed in the same tree. About Bella Bella I have seen them laid in niches of the rocks, in almost inaccessible places that had to be reached by ladders. At present the dead about Bella Bella are rolled in blankets, coverlids, and the like, and placed in boxes made after the pattern of the white man's coffin. The dead are mostly placed in grave-houses. These are diminutive buildings containing, besides the remains of the various members of the family, the children's toys, and dishes, clocks, lamps, articles of furniture, and other belongings of the departed. Blankets, dishes, food, etc., are burned at stated intervals near the grave-houses, and the old people believe that the spirits of the departed can utilize the essence, or spiritualizations of these things as soon as the flames have done their work. In some cases large holes are dug in the earth, and covered with loose, board floors, over which grave-houses are built, and bodies are occasionally deposited under the floors, as well as in the structure itself. Instances are known of the blankets and clothing about the dead being removed from time to time, and new material substituted. The Indians here are very jealous regarding the proper care of the dead. Those who watch by the bedside of the dying, and those who wash and lay out the body, besides those who chant the lament for the departed, are all well paid by the friends of the deceased. There may be neglect of the old and chronic invalids during life, but it is imperative that they get a proper burial. Some of the old Indian medicine men claimed to see the spirits of the departed partaking of the food that was being burned near the grave, and it was regarded as a great disgrace to have a medicine man state that he had seen the spirits of a certain man's relatives going about crying for food.

The bodies in time became quite dried. I have been told by one of our Indians here, James Starr, that he procured bodies for the man-eating dance. He secured "special dry" ones, and they were taken into a house where the dance whistles, etc., were kept, and here they were partially smoked. During the dance the man-eater was attended by some old women, who took great care that he

did not partake of more than was good for him. If he tore off a particular large piece it was pulled away from his mouth and secreted by them under one of their blankets. He states, also, that after the dance the man-eater took an emetic of salt water.

A MUSEUM, OR A MUSEE?

According to the Student's Standard Dictionary a museum is 'a building devoted to the collection, arrangement, and preservation of works or nature, art and antiquity, or to the exhibition of rare and instructive objects; also, the collection itself. Originally a temple or sanctuary of the Muses.' It is plain from this definition, that the object of a museum is *education*. Of late, the French word *musée* has been introduced as a name for any collection of monstrosities, alive or dead, exhibited in some place where, too often, the other attractions consist of not very high vaudeville performances, and it is not unusual to hear the Provincial Museum referred to by the latter name. There are occasional visitors, too, who express not a little disappointment because they fail to find wax figures, or effigies of any kind representing certain murderers and other criminals, whose names have been, from time to time, before the public.

It is not so very long since one of three young ladies (?) asked in a half whisper where to find "the chamber of horrors."

We shall, perhaps, always have morbid and stupid people to meet—people who regard a museum as a *musée*, and who desire to look only at what, as they themselves would say, is "awfully funny," or "awfully queer," or "awfully" something else, referring at the same time to the contents of the cases as "curiosities," or, more elegantly still, "curios."

If a public museum has no educational value it cannot be said that there is any reason for its existence. It is the duty, therefore, of those who are concerned in the maintenance and management of such an institution to make it all it ought to be, and endeavor to lead in the adoption of new methods, rather than to lag, or to imitating tardily those of other and more progressive institutions of a similar kind.

It is to the national museum that every scientific student's steps should be directed, and he should proceed thither with a well grounded hope that he will find there what he requires, or, failing this, that he will be put in the way of finding it somewhere else.

Here, too, there ought to be every kind of reasonable accommodation for those in search of information, for those who wish to make notes, or to sketch, or to photograph, and special arrangements should be made for the benefit of children. In some progressive cities there are children's museums, that is to say, small typical collections of local flora and fauna, besides instructive material of some other kinds, the character of which necessarily accommodates itself to the situation and circumstances of the town and its locality.

But no matter what kind of museum may be in question, it is imperatively necessary that everything on exhibition should be not only fully, but legibly labelled. Indeed, the label is not infrequently of much more importance than is the specimen to which it is attached. Labels, too, require to be renewed at intervals, not always be-

cause they become dingy, and shabby looking, but for other reasons, e. g., re-classification, and new or additional information; and in every instance they should be not only legible, but tasteful, and not so glaring or conspicuous as to make the collection look patchy.

Small maps and pictures of various kinds may often find place very advantageously in museum cases.

It has been stated that in a live museum there is enough work to keep busy an expert labeller for every twenty thousand specimens. This seems a reasonable estimate, but, of course, much depends on the nature of the collection, and the aim of the curator.

Dust is one of the museum's enemies, and, therefore, nothing should be left undone to keep the floors and walls, as well as the cases, scrupulously clean, and this demands the constant attention of one person for every thousand square feet of glass. Where small collections are concerned the services of the cleaner and labeller may be combined, but the combination is a difficult one to effect. Spasmodic cleaning is only a little better than no cleaning at all.

Many visitors look for a little attention, especially those who come from other cities; and all foreigners. Even, however, when this is not in question, there should be an intelligent attendant to whom reference may be made by enquirers, through whom valuable information may, sometimes, be acquired.

Every possible means should be employed to make visitors feel at ease. This is particularly desirable when people from the country parts are concerned. They are naturally somewhat more constrained in the surroundings than are those who live in towns, and have frequent access to public places. Such visitors should be assured by the attendants, and by all concerned, should opportunity offer, that the institution is public property, that strangers are cordially welcomed, and that there need be no hesitancy in asking for information.

It is quite out of the question to attempt the management of any museum worthy of the name, without facilities for performing numerous mechanical operations, for unless work of this kind is done promptly the place will in time look like anything but what it should. Casts of various kinds have to be made and painted, objects by all sorts need to be repaired, animals mounted, skeletons put together, skulls cleaned, pottery pieced, specimens cleaned, and many other things ought to be done in a room of this kind.

It is impossible to do too much by way of impressing on the public that while the museum is a place in which many pleasant hours may be spent merely in sight-seeing, the main object is an educational one, the purpose of which corresponds to that of a reference library. Here are the things you have read about, and of which you have seen pictures—come and see the things themselves.

Every museum, too, worthy of the name, should institute courses of lectures, or of familiar talks, for the benefit of those who care to attend. Classes from the city schools, accompanied by teachers, should be encouraged to visit the rooms from time to time, but not on Saturdays, as is usually the case when visits of this kind are made at all. Saturday is the young folks' day, in the sense that they should be at liberty to spend it as they please, recreatively. Besides this, if a collection is worth visiting at all, beyond simply being gawked at, it is worth some consideration, some study, and is, there-

fore, as well worth an hour or two's time in a week or a month as is often given to what some speak of irreverently as "educational frills."

INDIAN GRAVES IN MONROE CO., NEW YORK.

By J. G. D'OLIER.

"Just one and one-half miles southwest of the village of Honeoye Falls, Monroe Co., New York, and twelve and one-half miles due south of Rochester, on Spring Creek, is the site of the Seneca Village of Totiaction. It is two and one-half miles south southwest of the older site of Totiaction (Sonnontonan or La Conception of the Jesuits, also called Father Fremin's Village), which was destroyed by De Nonville in 1687. It is supposed that the village on Spring Creek was settled by the Indians of La Conception after its destruction. It must have been an important place, covering twenty or twenty-five acres. It is a pleasant site, occupying a flat about forty feet above the bed of the creek, where there is a pretty little cascade. Great quantities of relics have been found. Mr. John Dann, the owner, having over twenty-five almost perfect Seneca clay pipes. The site has also been very productive of glass and shell beads, brass rings, crosses, medals and kettles, hundreds of iron hatchets, gun barrels, etc. Gen. John S. Clark says that this village was the western door of the Long House, and the residence of Tegaranhies, hence sometimes called Tegaranhies' town.

In the spring of 1898 the writer opened a number of graves, some of which had been opened before, and the relics removed, the richest grave known to have been opened contained the skeleton of a man having a remarkably low forehead, around his neck there was a necklace of 120 bear's teeth, beside him were two pipes, one a Seneca clay, the other a Catlinite, three or four pounds of bullets, and one bar of lead. The graves are on two knolls, one a sandy loam, the other a coarse gravel, underlying the loam and gravel is a stratum of clean white sand about three inches thick, upon which the bodies are laid.

The graves vary in depth from $2\frac{1}{2}$ to $6\frac{1}{2}$ feet. The stratum of sand dips lower under the gravel than under the loam, thus necessitating the excavating of from 4 to $6\frac{1}{2}$ feet of gravel to reach the sand. May not a desire to reach the sand account for the varying depths? A few inches below the surface a layer of charcoal and ashes testifies to the use of fire as a part of the burial ceremonials.

Enclosed with this you will find some correspondence *re* seeds taken from a grave on this site. I am also sending a small quantity of said seeds, and a topographical map with the locality marked upon it.

Regarding the graves opened on Thanksgiving Day, the work was done in a cold, drizzling rain, and the *data* were not accurate enough to write from. The eight or nine graves opened were of a uniform depth, about $2\frac{1}{2}$ feet, the bodies in the same position, i. e., on left side, hands up to face, and legs doubled up to body, no evidence of fire, and, with the exception of a perfect clay pipe, no relics. One of the skulls showed the wormian bones, as did the one taken from the grave with the seeds.

One of the most interesting features in connection with these burials was the finding of a quantity of raspberry seeds.”*

In another communication Mr. D'Olier states that there was nearly half a pint, and that they were lying “loose in the grave beside the body, which was in a sitting posture.” What seems most probable is that the man had died after eating an enormous quantity of the fruit in question, and that the seeds, having remained undigested, were found as Mr. D'Olier mentions. It is, indeed, not unlikely that the presence of so large a quantity of undigested and indigestible material in the man's stomach was the cause of death.

THE ESKIMO A HUNDRED AND FIFTY YEARS AGO.†

RICHMOND FORT, 15th March, 1754.

TO MESSRS. WHITE & ISBESTER,

Commanders-in-Chief of Moose and Albany Forts.

GENTLEMEN,—This comes with the melancholy account of the dismal situation we are in at Richmond Fort, necessity having obliged me to keep two-thirds of our people tenting out and hunting partridges all this winter, there being no partridges to be seen near the fort.

The 21st of November sent Mr. John Stephenson and Mr. George Stephenson and Mr. George Humble, with one man and a boy, to Whale River House to trap foxes and hunt partridges.

The 25th of January they returned home, the time I ordered them to stay being expired, they informed me that three or four nights before they left Whale River House they heard something walk round the house, which to them sounded like a man's foot, it being night they did not think it safe to go out to see what it was, next morning they looked all round the house, but could not distinguish any foot marks from their own, so concluded it to have been a wolf or quicohatch, the next night following it came again, they in the house called out in English and Indian to know who was there, but received no answer.

I having found it necessary to make an addition to Whale River House for the lodgings of the people that will be there with me next summer to attend the whale fishery, had, therefore, concluded to send Mr. Pollexfen with the house carpenter and his mate, Hugh Corston, and two hands to look for timber at Whale River to build the addition to the said house.

The 22nd January sent Mathew Warden and four Indians to Whale River House with bedding, provisions, etc., belonging to Mr.

*Identified by Mr. G. H. Hicks of the Department of Agriculture, Washington, as either *Rubus villosus*, or *strigosus*.

†This paper, copied by Miss T. Muriel Merrill, *verbatim et literatim*, from the original manuscript, is of quite as much ethnological as of historical interest, affording as it does an excellent picture of the treachery which is so characteristic of Eskimo peoples.

Although the events relate to a period one hundred and fifty years ago, recent missionaries and travellers seem to regard the people in question as being but little better now than then.

Some ethnologists refer to the Eskimo as the proto-aborigines of America, who were driven northwards by the Indians.

Pollexfen, Geo. Clark, the house carpenter, and the other two that were to be at Whale River House, the above Mathew Warden being one of the four that was to be there and act as cook.

When Mr. Stephenson came home, which was on the 25th of this month, he informed me that the boy, Warden, and the Indians, in their way to Whale River (which was by the seaside) did see a man strike out from the main towards Knapp's Island, and took him to be some of the people that were at Whale River House with Mr. Stephenson and his crew in the house, then concluded it to be an Eusquemay.

The 28th in the evening the four men return'd home and inform'd me that they set out from Whale River House that morning for the factory, and in their way home about five or six miles to the northward of Whale River they saw five Eusquemays making towards them, our people being nearer Whale River House than the factory they made the best of their way back towards Whale River House, but the Eusquemays, being much swifter than our people, four of them came up with our people apace, so when our men found they could not get away, made a full stop and stood in a posture of defence, with their guns loaded. When the Eusquemays came near our people they laid down their bows and arrows, calling out Chimo, clapping their breasts and making all the signs of friendship they were able, our people laid down their guns, and did the same, so each party advancing met and embraced each other with signs of joy. Our people returned to Whale River House, and with them four of the Eusquemays. At their arrival at the house they found nobody at home, Mr. Pollexfen and the others being gone hunting. They kept the Eusquemays there near three hours, gave them bread and plumbs, which they eat, and drank some water, but at last making signs that the day was far spent, and that they had a great way to go, would stay no longer. They had not been gone about ten minutes before Mr. Pollexfen and the house carpenter came home, and were just got upon the ice. Mr. Pollexfen and the house carpenter laid down their guns at the house, and Mr. Pollexfen took an iron hoop in his hand, and he, with the house carpenter, went down upon the ice to the Eusquemay and gave them the iron hoop and four partridges, which the house carpenter had killed that day. They seemed extremely well pleased, shaking hands, hugging and clapping their breasts, and making all the signs of friendship they could, calling out Chimo. Mr. Pollexfen would have them back to the house to give them some things that might be of service to them, but they made signs that it was late, and that they would come next day, so struck out to sea for Knapp's Island.

The 1st of February I sent one Englishman and one Indian to Whale River house with some trading goods, and a letter to Mr. Pollexfen with some necessary orders to Mr. Pollexfen to trade or present the said goods as he should find necessary if the Eusquemays should come any more to Whale River House, and to use them with all the kindness he possibly can, and at the same time endeavor to make them understand that there is a great house in Artewenebeck (or St. Atwell's lake) and, if possible, to bring or send some of them to the fort, in the same letter I desired they might be upon their guard, and not go hunting but keep in and near the house, and if they were under any apprehension of danger on account of the Eusquemays to quit the place and come home. This evening Mr. Pollex-

fen and the boy, Mathew Warden, came here, and brought with them two Eusquemays. I took them into my room, and gave them some bread which they eat heartily, and drank plentifully of water, I then gave them two partridges with the feathers on them; they picked them, eat the guts, liver, hearts, with the contents therein all raw, I lent them a little kettle in which they boiled the two partridges, and eat them likewise, with some bread, and drank some water, I then gave them each a laced hatt, two hatchetts, some knives, some beads and several necessary things of no great value, of all which they seem'd to be extremely fond and thankful, and made signs to us how they killed the whales, I then let them see some fox skins, and made signs to them that we wanted those things. There was at the same time an Indian man in my room, to him they talk'd, shak'd hands and made great signs of friendship to him, I ordered my boy to give the Indian a fox skin, and tell him to trade it with me to let the Eusquemays see the nature of trade, the Indian acted his part very well, traded the fox skin for knives, and presented each of the Eusquemays with a knife, which they accepted with great signs of joy. Mr. Pollexfen inform'd me that the day after the four first Eusquemays were at Whale River House, there came near fifty, all men, but had nothing to trade, they behaved very civilly, and seem'd much pleased to see our people and the house, they then pointed to the river and made signs how they killed the white whale. Mr. Pollexfen used them with all the civility he could, and presented to an old man, who seem'd to be the Chief of the tribe, viz, One blanket, waste-coat, almost new, a pair of cloth stockings, one worsted cap all his own, and little worse than new, one trapping hatchet, a looking glass, and some other things, they stay'd about three hours, then went for Knapp's Island, except two of them, who stayed near two hours after the others were gone, which are the two that came to the factory with Mr. Pollexfen.

To return to the relation of the behaviour of the two Eusquemays that came here with Mr. Pollexfen, they sat up till after ten that night, then made signs they wanted to sleep, accordingly, I ordered some deer skin coats for them to sleep upon, and, accordingly, they went to sleep upon the guard room floor, and with them Mr. Pollexfen, who was so complaisant to them that he slept between them all right to keep them from fear, for they seem'd to take great notice of him, and seem'd concern'd when he was out of their sight.

Saturday, February 2nd, in the morning, I ordered one of our three pounders to be fired, at the seeing and hearing of which the two Eusquemays were seemingly pleased, and very much surprised. Mr. Pollexfen and one of our people, with the two Eusquemays, set out for Whale River House, the boy, Mathew Warden, being tired, and not able to return with Mr. Pollexfen, continued at the factory to rest himself a day or two till he was able to go to Whale River, he being the cook for the people there, this day, 2nd February, sent some of our people to order all our men from the partridge tents, in the evening some of them came home, and the rest next morning.

Sunday, 3rd, we loaded all our trading guns, got two guns upstairs, one in each flanker facing the sloop, the one a one-pounder and the other a swivel, and placed them to fire out of the windows to clear the sloop if any of the Eusquemays should attempt to do her any damage. About two o'clock this afternoon we saw several

Eusquemays about a mile and a half to the westward of the fort, they no sooner came in sight of the fort than they made a full stop, then drew back behind a point of rocks out of our sight, stay'd there a little, then nine of them advanced towards the fort as far the Road Island, which is about one mile to the westward of the fort, there they stopp'd about one quarter of an hour, hallowing and calling out Chimo, and tossing their coats and waving them over their heads. I, with some of our people, got upon the house, calling out Chimo, Chimo, and waving our hats and caps for them to come to us, which they did, till they came to a little island about a quarter of a mile from the fort, where they stopp'd a little calling out Chimo. We did the same, then they advanced till they came within about 200 yards of the fort, they made a full stop, and laid down some bundles of old coats, boots, shoes, and such like things. I then went out with my gun in one hand and sword in the other, and advanced within about 100 yards of them, they then laid down their bows and arrows, I then laid down my gun, so went up to them with my sword only, when I got almost to them they advanc'd towards me with their knives in their hands, the which as soon as we met they offered to deliver up to me, which I refused, they shook hands with me, hugg'd me, and made all the signs of friendship they were able. I then brought them up to the factory gates, and, being sure all our people were upon guard, I made signs to the Eusquemays to lay down their knives, which they willingly did, I then took them into my room, and gave them some hard bread, which they eat, and then drank some water. I gave them several necessary things, such as hatchets, knives, small hand saws, files, and several other things, all of which they accepted with great joy, offering their coats, boots and such things in exchange. I then let them see some fox skins, and made signs to them that those were what we wanted. I likewise let them see a little piece of whale bone, and made signs that we wanted such as that in exchange for our goods, at the same time made them understand that what I had given them was at their service, and that I would take none of their coats, boots, etc., in exchange. Dinner coming upon the table, I ordered my boy to bring me a bottle of red port, of which I gave every one of the Eusquemays about a quarter of a glass, which they drank, and seem'd to like it much, I then gave every one of them a little of the victuals we had upon the table, which happen'd to be a rump of fresh venison, which pleased them much. after dinner they made signs to go away. I then ordered the doors and gates to be open'd, so they went out and parted with us with all the signs they could possibly make of friendship to us, and we did the same to them.

The Indian that was sent to Whale River the 1st of this month with some trading goods to Mr. Pollexfen returned this evening, and brought me a letter from Mr. Pollexfen informing me that he arrived safe at Whale River House about four o'clock the same evening of that day he went from here with the two Eusquemays, and that they, the two Eusquemays, left him as soon as they came in sight of Knapp's Island, and made towards it, at parting they made signs that they would go with their countrymen to the factory. The Indian above mentioned, in his way home, met the nine Eusquemays riding in two great sledges drawn by six dogs in each sledge, as soon as they see the Indian they drove towards him as swift as if

they had been drawn by Rain Deer, when they got within fifty yards of him they stopp'd, got all off the sledges, and came to the Indian (leaving two men to keep the dogs) they shak'd hands with him, and made all the signs of friendship to him he could desire, he then gave them four knives (which I gave him to present if he should see any Eusquemaw in his way to and from Whale River) with which they were extremely well pleased, so shak'd hands and left him.

Monday, 4th February, eleven Eusquemays came here, I took them into my room, three at a time, used the same as I had done the others that had been here the day before, and they seem'd as well pleased as the former, stay'd near two hours, and went from here at one o'clock in the afternoon. This evening the ship carpenter and another man came here from Whale River House and bro't me a letter from Mr. Pollexfen, in which he tells me that no Eusquemays had been at Whale River House since the first of this month. The carpenter, in his way home not far from the Gulph met the above mentioned eleven Eusquemays, upon sledges, they got off from their sledges, shook hands with him, and the other man made signs of friendship, and left and remounted their sledges, and drove with great swiftness towards Lady Lakes Grove.

Tuesday, 5th, sent Mathew Warden, the company's apprentice, a lad about eighteen years of age, and another man with him to Whale River with a letter and some necessaries for Mr. Pollexfen and the other two men.

Wednesday, the 6th, the Eusquemays being no ways troublesome, and our English provisions being better half expended, necessity obliged me to send some of our people to the partridge tents and, accordingly, sent six hands, this morning two Eusquemays came here, brought a little seals blubber, for which I gave them some knives, beads, etc., with which they were well pleased, I used them with the same civility I had done the others, they staid about an hour, then went away.

Friday, the 8th, the man that went with the boy Warden, last Tuesday to Whale River return'd with a letter from Mr. Pollexfen in which he says there have been no Eusquemays there since the first of this month, but if any more should come he will use them with as much civility as possible, and dispose of the trading goods which I had sent him as frugal as possible, and to the best advantage for the company's interest.

Saturday, 9th, at ten o'clock in the morning, Mr. Pollexfen, the house carpenter, and Hugh Corston came home from Whale River House, and inform'd me that having seen no more Eusquemays at Whale River concluded they would come no more, therefore, being tired with being confined in the house, living upon salt pork, and no exercise, they last Friday went out hunting, and left the boy Warden to cook dinner, and strictly charged him that if any Eusquemays should come, to keep in the house, make the doors and windows fast, and not suffer any of them to get into the house. About four in the evening Mr. Pollexfen return'd from hunting (the others being home a little before him) but to his great surprise he found the house plundered, the poor boy gone, their bedding toss'd all about the house and out of doors, and everything of iron-kind gone, the carpenters' tools, cross-cut and other saws, mauls, hammer, two great open brass kettles, one large copper stew kettle, one iron pot,

broke open a cask in the house containing spikes, nails, hinges, and such like things, all which they took away. In the little trading room was a cask containing several brass and tin trading kettles and tin pots, all which they took away, and rip'd the hinges and handles off my chest I left there last summer and have not yet had an opportunity of getting it home. At six in the evening Mr. Pollexfen set out (in company with Geo. Clark, the house carpenter, and Hugh Corston) for the factory, and arrived here next morning. Amongst the rest of the things taken away by the Eusquemays were three muskets, two pistols, six cutlasses, about one and a half of gunpowder, near ten of shot, and a new fowling peice. This day sent two men to the partridge tents to order the six men home that were sent there Wednesday, the 6th.

Sunday, 10th, our partridge hunters came home, this day gave orders for a watch to be kept night and day in the same manner as is kept on board the company's ships, placed every man in his station that he may know where to go in case of an alarm. We having but nine casks of English provisions, and no likelihood of getting any country do. and now being confined to the house, no person daring to go out to look for any fresh provisions, I am necessitated to put our people to the following allowance, viz., For four men per day, half a piece of pork, one quart of peas, two of flower, and half of plumbs.

Wednesday, 13th, our people having now sufficiently rested themselves, I thought it necessary to try how many men I could muster to go in quest of the Eusquemays to endeavor by force of arms to recover Mathew Warden if I with the council appointed by the company should find it necessary and warrantable to put it in execution, and, accordingly, thirteen of our people sign'd their names to go upon that expedition. All this day and the night following I seriously considered all the consequences that might attend such a dangerous attempt as to send thirteen raw and undisciplined men without proper clothing at this season of the year, having no beaver coats in the factory to make toggy's nor mittens, caps, etc. I say to send those men out to the islands in quest of the Eusquemays in the open bay seven or eight miles from the main, and for the most part hazy on account of the Gulphs being open all the winter, and upon those islands not one drop of fresh water to quench their thirst, nor one stick of wood to make a fire, and, perhaps, hundreds of Eusquemays, and if they should conquer our people there would be no more people to guard the company's factory than myself and seven men, which is no more than two to a flanker, so if the Eusquemays should attempt to take the factory they may do it very easy, for if they should lurk about the factory for three or four days, which they may do among the rocks in sight of us where we cannot bring one gun to bear upon them, and they not above twenty yards from the house, for so near stands the factory to the steep bank of the shore and a high hill behind it within 100 yards, and if they should lurk about for the time above mentioned we must surely die for want of rest, and they take the factory, especially if they conquer the above thirteen men, and attack us with their guns, pistols, swords and other instruments of war.

Thursday, 14th, in the morning, I call'd a council and gave my opinion as above, but if in future any Eusquemays should come to

the factory to take two prisoners and put them in irons till they returned to the boy, Warden, so after mature deliberation in council we came to a resolution not to attempt going in quest of the Eusquemays.

There being several things which the Eusquemays had left in and about Whale River house when they plunder'd it, that could not be brought home by Mr. Pollexfen and the two men that were with him at Whale River, particularly 33 pieces of pork, six muskets, which were set up the river for foxes, and several other things, such as bedding, etc. Accordingly Mr. Pollexfen offered his service to go with what number of people I thought necessary to send with him to bring home the above mentioned things (if remaining) from Whale River House. This morning he, with ten men well armed, set out from here for Whale River.

Saturday, 16th, Mr. Pollexfen and his men return'd home from Whale River and brought home the muskets and what other things the Eusquemays had left, they having been there since Mr. Pollexfen left the house and taken away sev'l other things except the pork, and stripp'd the inside of the house of all the iron work they could find, rip'd open Mr. Pollexfen's bed, cutt out the bottom of the bed place and did all the mischief they could except burning the house.

Thursday, 21st, our people having grumbled among themselves about the short allowance, I offered to let ten of them set out this morning for the partridge tents, four to the eastward upon the Main, three to Winter's Mortlake, and three to Elderton's forrest, which is about seven miles to the west southwest of the fort upon the South Main, the four first mentioned went from here sooner than the others and were out of sight before the others set out from the factory. When the latter six men had got about half a mile from the fort one of them came home and inform'd me that they did see several Eusquemays coming towards the fort, I then called the other five men home, placed every man in his station and upon guard, at noon three Eusquemays came in sight, got upon Road Island calling out Chimo, stopp'd some time, then slowly advanced, and stopp'd several times calling out Chimo. We did the same at the fort. At last they came within about 300 yards, then made a full stop, I then sent two of our people to them, with whom they shak'd hands and seemed as innocent as doves, when they came to the gates we conducted them into the house, used them as kindly as we had done others before them, after they had been in the house some time I put two of them in irons, right leg and left both together, then brought before them Mr. Pollexfen and the other two remaining men that were at Whale River House, and made signs to know what was become of the boy, but could learn nothing from them concerning the boy, for they outwardly took no notice of the signs I made them, I then made signs with my sword placed to one of their necks that if the boy was not return'd I would cut off the heads of those two in irons, so then conducted them all three to the outer gate, set the fellow that was not in irons at liberty to go and acquaint his countrymen that I had detain'd his two companions prisoners, and would put them to death if the boy was not return'd, at parting the two in irons seem'd unconcern'd, as did the other, neither party spoke one word, I then ordered the two prisoners to be brought into the guard room, and ordered the people upon watch to use them kindly.

Before I put the two above mention'd men in irons I had them all three in the upper guard room I caused our people to pass several times through the said room by way of the flanker doors changing their dress every time, so to all appearance the Eusquemays had reason to think that we had above 100 men for our people passed so quick that it was impossible to distinguish their faces, the Eusquemays seem'd somewhat surprised at the number of people, but spoke not one word all the time, as our people passed by them, except sometimes Chimo.

At six o'clock in the morning I went downstairs, and was informed by the people upon the watch that the Eusquemays had been very quiet all night, till about five in the morning, when Mr. Humble and one man (who I had ordered to go to the eastward to order home the four men sent yesterday morn to hunt partridges) at their going out with their guns and snowshoes, they, the Eusquemays, changed countenance and looked very sour and began to talk in an angry manner, at last got up to rest their legs, making signs the irons hurt them, they continued standing near an hour at the end of a partition, at the back of which in a corner close to where the Eusquemays stood there were some small arms, unknown by those upon the watch, (as they told me) placed there by some of our people I having order'd all the guns which were design'd for the defence of the lower guard room to be placed in a corner of the said room not much frequented and I myself placed some there accordingly. Mr. Pollexfen, observing the Eusquemays to stand so long, and so close to the end of the partition suspected some arms were there, they held fast by the end board of the partition, and would not stand aside, upon which Mr. Pollexfen himself endeavored to push them away, but could not, the house carpenter then got up and endeavored to get them away, then one of the Eusquemays with a knife which he had concealed in his coat sleeve endeavored to stab the carpenter, upon which our people drew back to get their arms, the Eusquemays then seized two guns, clubbed them and endeavored to kill the people upon the watch, and fought with great resolution and fury, the place being so narrow and so low that our people could not knock them down though desperately wounded. Our people being fearful of the guns going off which the Eusquemays had in their hands, and might by chance kill some of our people, so one of our men shot one of the Eusquemays, I gave orders not to shoot the other, but knock him down if possible, but he, keeping his guard so well and fighting with great rage and fury notwithstanding he was desperately wounded, and the thumb of his right hand cutt off at last was obliged to shoot him also. I ordered their corps to be taken out of the house, and put into our store cellar, there to remain till we came to a resolution how to dispose of them. The same day two families of home Indians came here, they being fearful of the Eusquemays beg'd me to take them into the house, I did so, knowing by experience that they are our friends, the same evening came here our trusty friend Robinson Crusoe (an Indian so called by the English) and brought venison to the quantity of two deer, he is the only best Indian we have here both for provisions and whaleing, and has brought more country provisions to the factory than one-half of all the Indians belonging to this place, the same

evening Mr. Humble, with the people from the partridge tents, came home.

Saturday, 23rd, about 10 o'clock in the morning, near Road Island we saw two Eusquemay dogs with a sledge lying upon the ice, they continued for some time there, then came with the sledge within about 150 yards of the factory, then laid down for near two hours, but upon some of our people being ordered by me to go out and shoot them, they got up and got without gunshot before our men fired, and went towards the Gulph with the great sledge as fast as any two horses ever did in a post chaise. We have great reason to think the Eusquemays are still lurking about the factory island, so are obliged to keep close quarters, and a good watch.

Saturday, 2nd March, the Indians beg'd of me not to keep the corps of the two Eusquemays any longer, nor hang them in chains (as I told the Indians I intended). The Indian we call Robinson Crusoe told me that if our boy should be living and the Eusquemays should see their countrymen hanging in chains, they then in revenge would kill and eat the boy, but as they don't know whether or no their two countrymen are dead or alive, they in time may return the boy (if living) in hopes of having their own two men returned; I then gave the two dead Eusquemays to the Indians, first cutting an ear off each of their heads, and have sent them in a bottle of spirits, which you gentlemen, Chiefs of Moose and Albany Forts, may dispose of them to the Indian Captains of each place or any other you think proper, this day the Indians cut a hole in the ice and put the two dead Eusquemays out of sight.

Wednesday, 13th of March, in the morning, sent two Indian men to the eastward to bring home some things left by our people at the partridge tents; after the Indians had got about six miles from the fort, they see a great number of Eusquemays making towards our island in a common track way from the partridge tents, as soon as they saw the two Indians they drew behind an island, as the Indians supposed, to hide themselves in order to get the Indians into their hands, but the Indians returned back to the fort as fast as possible, and informed me as above, and that they, the number of Eusquemays they saw to be about 150, whether they are those that have been about here or others we know not.

I have now, gentlemen, given you a full account of the woeful situation we are in, and beg one of your sloops may come here as soon as possible to our relief, for should the ship be late this year we must starve to death, for no Indians will come near us, neither to trade, kill whales or bring any provisions. I don't think that I can get above three men to stay here another year, for the provisions we expect from England will not serve above five months. I hope one of you gentlemen, the Chiefs of Moose and Albany Forts, will come here in the sloop to be here when the ship arrives to consult what's best to be done for the company's interest. I have no more to add, only beg your answers as soon as possible, that we may know what we have to expect, so remain, gentlemen,

Your very humble servant,

JNO. PORTS.

JEAN FRANCAIS ALBERT DU POUGET, MARQUIS DE
NADAILLAC.

Born, July 16, 1818; died, Oct. 1, 1904.

[Among those who, during the last half century, have devoted their attention to the study of Primeval Man, few wrote more or better than did the late distinguished Marquis de Nadaillac. The range of his reading was wide, and he was as profoundly interested in the Huron-Iroquois of Ontario, as in the ancient people of Great Britain or of France, and in the cliff Dwellers of Colorado as in the Troglodytes of the Dordogne. For a good many years he has taken a very kindly interest in the archaeological work done in this country.

As a correspondent he was most charming,—quite as willing to give information as he was desirous to receive it,—free from dogmatism and pedantry in the expression of his own opinions, and charitable in combatting those of others.

Some of his largest and most valuable works have been translated into English, German, Italian, and other languages.

The Vicomte de Nadaillac has kindly complied with a request to supply the following notes respecting the life and authorship of his illustrious father, whose work was so well known to many students and general readers in this country.] D. B.

"Jean, Francois, Albert du Pouget, Marquis de Nadaillac was born in London July 16th, 1818. He was the eldest of the children of Sigismond du Pouget, Marquis de Nadaillac, General Inspector de Cavalerie, and of Marie Mitchell.

The house of Pouget has always been a prominent one among the nobility of Guercy and Perigord and can trace its military origin to the days of chivalry which preceded the middle of the eleventh century. About 1467 Pierre du Pouget became Seigneur de Nadaillac. This family has furnished a number of captains, provincial governors, cardinals and bishops.

The Marquis de Nadaillac, who has just died, began his study in Paris and prepared for St. Cyr, but did not enter there. He devoted himself to the study of law, and in 1843 underwent successfully the examination for a license, before the Faculty of Paris. In 1845 he married Mademoiselle Edith Roussel de Courcy by whom he had two sons and one daughter.

The legitimist leanings of the Marquis de Nadaillac, whose infancy was passed in the Tuilleries in close companionship with the Comte de Chambord, prevented him from holding any public office. During the empire, in 1871, Monsieur Thiers appealed to his patriotism and conferred on him the Prefecture des Basses Pyrénées, where a Carlist insurrection gave him much trouble. His tact and energy were largely instrumental in quelling this uprising.

In 1876 he was nominated Prefect of Ludre and Loire, a district where he had passed part of his youth with his grandmother, the Duchesse d'Escars in her Chateau of La Ferriere.

Disqualified, and finally recalled in 1877 by the fall of Marshall MacMahon, he gave himself exclusively to study both in Paris, where he lived during the winter, and at Rougemont in le Vendamois, where he passed his summers.

A piece of polished stone, he one day picked up by chance, while superintending some work, led him to engage in prehistoric research. At the beginning of 1870 appeared his first work on "L'Anciennete de l'Homme." In 1881 he published two quarto volumes entitled "Les Premiers Hommes et les Temps Pre'historiques. "L'Amerique Prehistorique," a large quarto volume published in 1885, met

with great success on both sides of the Atlantic, and was translated into several languages. In 1888 another volume followed on "*Mœurs et Monuments es peuplies prehistoriques.*"

The Marquis de Nadaillac was, up to the time of his death, an assiduous collaborator and correspondent of "*L'Anthropologie*," "*La Nature*," "*La Revue des Matériaux de l'histoire primitive et naturelle de l'homme.*" He wrote also in "*La Science Catholique*," "*La Deutsche Revue*," "*La Ravista Nacional*," etc.

Prehistoric questions concerning Europe and America were first but not alone in his mind, *La Depopulation de la France par l'affaiblissement progresif de la natalite*, *La mouvement de la Population du Globe*, *Les Expeditions polaires*, *Le Developpement de L'Amerique*, *Les Mines d'on du Yucon*, *Les Colonies Anglaises*, *L'Afrique*, *Le Negus Menelik*, *Les Chinois*, *Les Japonais*, and many other subjects were treated by him in different journals.

These numerous works opened to him the doors of L'Institut; he was elected in 1884 correspondent of L'Academie des Inscriptions et Belles Lettres. Foreign academies honored him by making him an associate or corresponding member, as for instance those of Madrid, Turin and Belgium. He occupied a prominent place in many learned societies in Europe and America, of which a list is appended. numerous societies did him the honor to make him Vice-President or President of sections. He took part in the committee of organization of the sections of Ancient Art and Prehistoric Sciences at the Universal Expositions of 1878 and 1889.

The Marquis de Nadaillac was President of the Council of a mutual life assurance company *La Fraternelle Parisienne*, which in 1902 celebrated the fiftieth anniversary of his admission to the council by hanging his portrait in the council chamber.

Up to the end of his life he preserved intact his faculties and fine intelligence. The day before the evening of his death he finished an article on Japan which "*le Correspondant*" published on October 25th. He had also undertaken a great work on Jean XXII. and Cardinal du Pouget Legate of that pope, in Upper Italy.

The death of his daughter, the Countesse de Florian, which took place on the seventeenth of last August, proved a shock from which he never recovered. He passed quietly away October 1st, while sleeping in his arm-chair.

According to his wish he was buried at La Ferriere in Touraine. My father died, as he had lived, a christian."

LEARNED SOCIETIES OF WHICH HE WAS A MEMBER, AND THE DATE OF HIS ADMISSION THERETO.

- 1862, Member of the Archæological Society of Vendamois.
- 1865, Member of the (?) Society
- 1869, Member of the Anthropological Society of Paris.
- 1869, Member of the French Archæological Society.
- 1872, Member of the Ramond Society.
- 1873, Member of the Societe Polymathique du Marbitran.
- 1879, Member of the Scientific Society of Brussels.
- 1879, Member of the Geographical Society of Paris.
- 1883, Honorary member of Anthropological Society of Washington.



JEAN FRANÇOIS ALBERT DU POUGET, MARQUIS DE NADAILLAC.

1884, Corresponding member of Brussels Anthropological Society.

1884, Corresponding member of Numismatic and Antiquarian Society of Philadelphia.

1884, Corresponding Member of the Academy of Inscriptions and Belles Lettres.

1885, Member of Science Society.

1885, Member of Academy of Natural Sciences of Davenport.

1886, Foreign Associate of American Philosophical Society.

1888, Honorary Foreign Member of Archæological Society of Belgium.

1888, Foreign Associate Royal Academy of Belgium.

1888, Member of the Bibliographic Society.

1889, Correspondent of the Royal Academy of Sciences of Madrid.

1889, Member of the Council of the Historical Society of France.

1889, Member of the Anthropological Institute of Great Britain and Ireland.

1889, Member of the American Society of France.

1890, Correspondent of Royal Academy of Science of Turin; Member of Committee of French Society for Advancement of Science.

1891, Member of the Society of Northern Antiquarians; Catholic Society of Political and Social Economy; Honorary Member of Archæological and Historical Federation of Belgium.

1892, Member of American Academy of Political and Social Science.

1895, Fellow of Anthropological Society of Great Britain and Ireland; Member of Society of Americanists.

COMMISSIONS AND COMMITTEES IN WHICH HE TOOK PART.

1878, Member of the Commission of Ancient Art at the Universal Exposition of Paris.

1885, President of Section of Natural Sciences at the 2nd Congress of Catholics.

1886, Vice-President of the International Medical Congress at Washington.

1888, Member of the Committee of Organization of the Universal Exposition, Retrospective of Work and Anthropological Sciences of Paris: 1889; Vice-President of International Congress of Anthropology, New York; Vice-President of the International Congress of Catholics and President of the Section of Anthropological Sciences of the Congress; Member of the Committee of Organization of the International Congress of Anthropology and Prehistoric Archæology at Paris.

1889, President of the Section of Anthropological, Ethnographic and Linguistic Sciences at the Congress of Geographic Sciences of Paris; Member of Committee of Organization of Ethnographic Sciences.

1890, Vice-President of Committee of Organization of Congress of Americanists and Vice-President of Congress.

1891, Member of Committee of Organization of International Congress of Anthropology, and Archæology; Vice-President of Scientific Catholic Congress at Paris, and President of Section of

Anthropology; Member of Committee of Fourth Centenary of Discovery of America.

1892, Member of Council of Congress of Religions at Chicago.

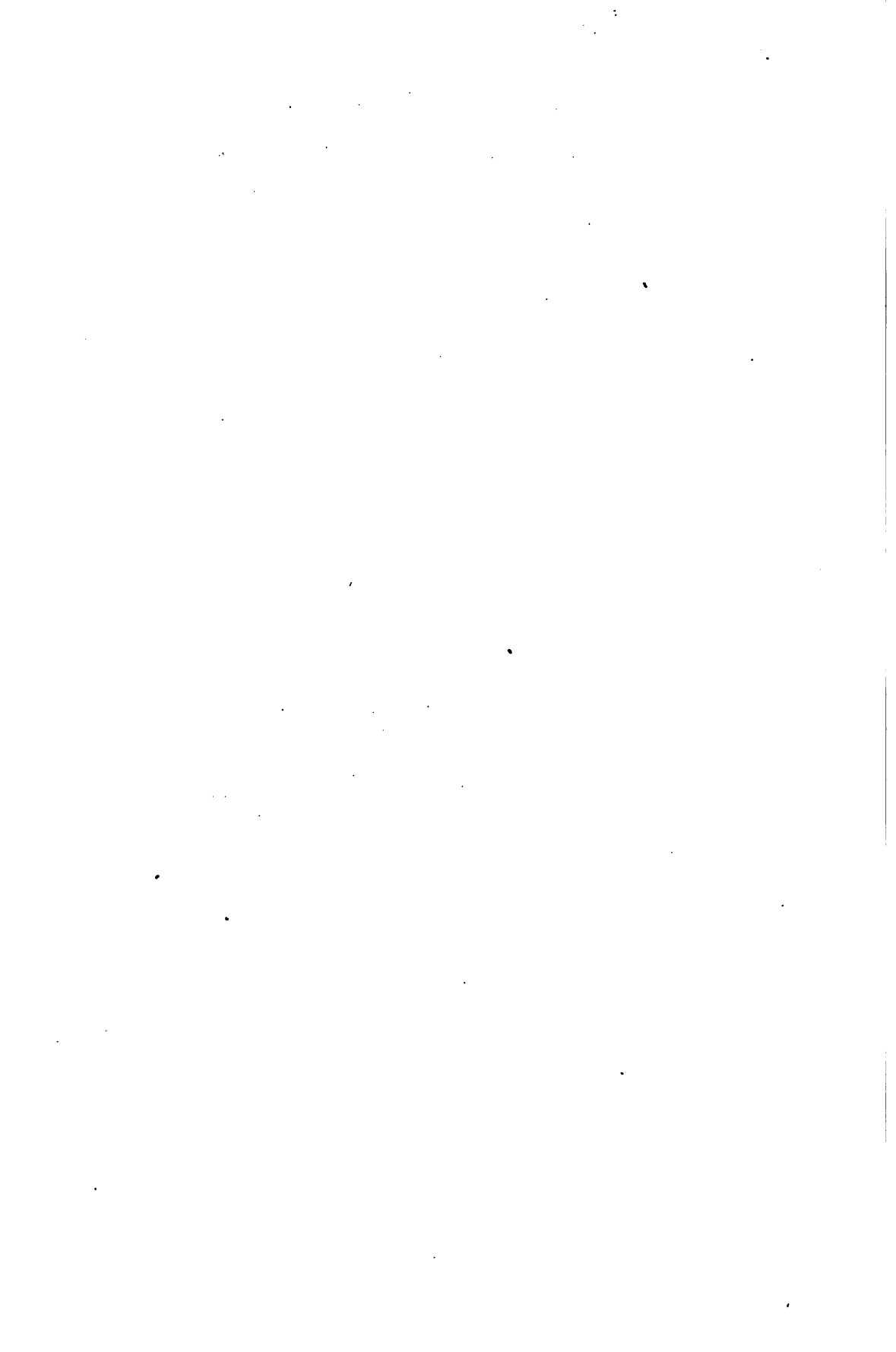
1893, Member of Committee of Patronage of the Catholic Institute of Paris.

1900, Member Charged with Organization of the Congress during Universal Exposition of Paris in 1900.

CORRECTION.

For facial, line 7, page 92, in last year's report, read cephalic.

Readers who may have, without wishing to keep, copies of the reports for from 1886-7 to 1893 will confer a favor by returning them to the curator, who will be glad to pay postage.



UNIVERSITY OF TORONTO

AUDITOR'S REPORT

TO THE

BOARD OF TRUSTEES

ON

CAPITAL AND INCOME ACCOUNTS

FOR THE

YEAR ENDING 30TH JUNE, 1904

ADOPTED SEPTEMBER 17TH 1904.



TORONTO:

Printed and Published by L. K. CAMERON,

Printer to the King's Most Excellent Majesty.

1904.



TORONTO:

WARWICK BROS. & RUTTER, LIMITED PRINTERS.

UNIVERSITY OF TORONTO.

Auditor's Report to the Board of Trustees on Capital and Income Accounts for the Year Ending 30th June, 1904.

To the Trustees of the University of Toronto:

GENTLEMEN:—I have the honour to present the financial statement for the year ending 30th June, 1904.

The estimates for the financial year passed by you on the 10th October, 1903, show:—

Expenditures	\$193,113 00	
Less those upon four departments maintained by the Government	42,449 50	
Available Revenue		\$150,663 50
		116,871 72
An estimated deficit of.....		\$33,791 78

The "Fees" item of Revenue income again exceeded the estimates, this year to the extent of \$3,850.00; lessened to the extent of \$270.00 in other income receipts; leaving the net deficit of the year \$30,207.54; a less sum to the extent of \$3,484.24, than it was anticipated the Government would be called upon to make good.

The Expenditures upon Revenue Account, in this report, are returned in detail as Appendix 4; the summary thereof, consisting of the return made in previous years, as Schedule 5 d of Appendix 1.

The main increase in expenditures is due to the larger quantity of coal consumed during the severe winter of 1903-04, some \$1,500.00; which is about twenty-five per cent more than the estimated cost of this item. This increase was fully offset by savings in other services as shown in the "Unused" column of the Summary.

It will be seen from Appendix 3 that the Expenditures upon the four departments directly maintained by the Government, have been kept within the Estimates to the extent of \$16.32.

W. H. CROSS,
Auditor.

Toronto, 13th September, 1904.

APPENDIX I.

BALANCE SHEET 30TH JUNE, 1904.

FUNDS.

General Endowments Fund, Schedule 1.....	\$3,482,783 51
Specific Endowment Funds, Schedule 2.....	83,232 37
Retirement Fund, Schedule 3.....	84,751 16
Trust Funds, Schedule 4.....	22,204 42
Revenue outstanding accounts, Schedule 5.....	11,012 45
	\$3,683,983 91

ASSETS.

Site lands, buildings and contents, Schedule 6.....	\$1,616,751 42
Unproductive lands, Schedule 7.....	754,402 63
Leased property, Schedule 8.....	502,458 48
Investments and cash, Schedule 9.....	810,207 76
Past due fees, Schedule 10.....	163 62
	\$3,683,983 91

SCHEDULE 1.

GENERAL ENDOWMENTS FUND.

Fund of 30th June, 1903.....	\$3,505,902 68
Value of additions to Library during year 1903-4 as shown by Accession Catalogue.....	5,861 10
Less depreciation of three per cent. upon \$133,270.46.....	3,998 11
	1,862 99
	\$3,507,765 67

DEDUCT.

Outlays upon Building (the Park Hospital) removed from the site of Science Building recently erected.....	24,982 16
Fund of 30th June, 1904.....	\$3,482,783 51

SCHEDULE 2.

SCHOLARSHIP TRUST FUNDS.

Blake, Matriculation.....	\$23,966 36
Blake, Science and Moderns.....	3,750 00
Moss, Classics.....	2,000 00
William Mulock, Classics and Mathematics.....	2,000 00
Daniel Wilson, Natural Science.....	2,000 00
George Brown, Modern Languages.....	1,128 34
George Brown, Medical Science.....	5,391 72
Mary Mulock, Classics.....	2,778 74
William Ramsay, Political Economy.....	1,009 42
Julius Rossin, German.....	1,000 00
Bankers, Political Science.....	1,200 00
John Macdonald, Philosophy.....	2,030 00
Physics.....	2,350 00
Prince of Wales, General Proficiency.....	950 00
Mackenzie Memorial.....	17,834 60
Fulton Bequest.....	3,291 30
Starr Bequest.....	4,919 60
Lyle Medal.....	208 35
Young Memorial.....	3,108 94
Gibson, Matriculation.....	2,100 00
Board of Trade, Commercial.....	200 00
McCaul Scholarship.....	15 00
	\$83,232 37

NOTE.—TRANSACTIONS FOR YEAR.

Return of 30th June, 1903	\$80,646 26
Interest appropriation	4,369 69
Rent, Starr Farm	120 00
Dale Scholarship	60 00
McCaul Scholarship	90 00
Reeve Scholarship	250 00
Goldwin Smith Scholarship	50 00
Sinclair Scholarship	25 00
Flavelle Travelling Fellowship	750 00
Gibson Matriculation Cash	100 00
Gibson Matriculation, 20 shares Hamilton Cataract Power and Light Co. Stock	2,000 00
	<hr/>
	88,460 95
Scholarship Expenditures	5,228 58
	<hr/>
	\$83,232 37

SCHEDULE 3.

RETIREMENT FUND, BENEFICIARIES 30 JUNE, 1904.

James London	\$8,477 74
Alfred Baker	5,344 41
Maurice Hutton	5,344 41
R. Ramsay Wright	5,344 41
W. J. Alexander	5,344 41
J. G. Hume	5,049 87
J. F. McCurdy	4,324 03
James Mavor	4,046 19
G. M. Wrong	3,350 58
A. B. Macallum	2,860 52
W. H. Fraser	2,784 40
John Squair	2,784 40
J. E. Berkeley Smith	2,658 24
John Fletcher	2,616 67
W. J. London	2,029 66
D. R. Keys	2,029 66
H. H. Langton	1,898 64
W. Lash Miller	1,538 34
W. S. Milner	1,482 45
J. H. Cameron	1,482 45
G. H. Needler	1,472 30
August Kirschmann	1,519 30
A. T. Delury	1,316 04
C. A. Chant	1,306 89
Adam Carruthers	1,281 51
James Brebner	1,280 06
W. R. Lang	1,139 89
J. C. McLennan	978 48
R. G. Murison	709 30
G. W. Johnston	709 29
P. Toews	440 71
T. L. Walker	568 62
F. B. Kenrick	248 53
F. B. Allan	248 53
F. Tracy	276 93
B. A. Bensley	159 26
W. H. Piersol	112 20
J. H. Faull	96 60
A. H. Abbott	58 37
F. J. A. Davidson	37 87
	<hr/>
	\$84,751 16
Fund of 30th June, 1903	\$73,492 48
Interest as per terms of O. C.	4,576 18
Contributions 1903-4	6,682 50
	<hr/>
	\$84,751 16

SCHEDULE 4.

TRUST ACCOUNTS.

Library Funds :

Insurance	\$8,154 47
Greek	30 00
King Alfred Millenary Fund	10,462 29
Phillips Stewart bequest	1,500 00

Biological Students Supply.....	\$136 37	
Local Lectures Fund	168 35	
Residence Extension Fund	1,018 90	
Langton Memorial	30 00	
Sir Wm. Mulock	684 04	
Alumnae Prize	20 00	
		<u>\$22,204 42</u>

NOTE AS TO YEAR'S TRANSACTIONS.

Return of 30th June, 1903.....	\$24,960 03	
Interest appropriations	838 40	
Receipts during 1903-4.....	1,264 50	
		<u>\$27,062 93</u>

Library Expenditures from :

Insurance Account	\$3,388 99	
Medical Fund	300 00	
King Alfred Millenary Fund.....	118 41	
Biological Students Supply Account.....	740 82	
Local Lectures Fund	60 56	
Museum Donations	44 78	
French Prose Prize	10 00	
Frederick Wyld Prize	75 00	
Pastoral Plays	119 95	
		<u>\$4,858 51</u>
		<u>\$22,204 42</u>

SCHEDULE 5a.

Contingent Fund	\$18,065 92
-----------------------	-------------

OUTLAYS IN SUSPENSE.

Fire Premiums ; three year policies.....	\$5,149 88	
Less portion paid by Medical Faculty	441 00	
		<u>\$4,708 88</u>
Casual Premiums	101 40	
		<u>\$4,810 28</u>
Less charge upon 1903-4 Revenue.....	2,000 00	
		<u>\$2,810 28</u>
Amount carried forward	2,093 19	
Dining Hall advances.....	1,500 00	
Granolithic Walks	650 00	
Printing Plant		
		<u>\$7,053 47</u>
		<u>\$11,012 45</u>

SCHEDULE 5b.

INCOME ACCRUED BUT NOT DUE.

Accounts.	30th June, 1903.	30th June, 1904.
Debentures	\$5,796 05	\$5,674 24
Mortgages	4,095 83	3,621 11
Park Rentals	6,258 20	6,258 20
School of Science Rental.....	154 58	154 58
Business Rentals	808 84	833 84
City of Toronto	1,500 00	1,500 00
Interest from Land Sales.....	1,289 80	1,363 41
Endowment Item Totals	<u>\$19,903 30</u>	<u>\$19,405 38</u>
Agricultural Fees.....	24 62	68 62
Fees past due	59 50	95 00
	<u>\$19,987 42</u>	<u>\$19,569 00</u>

SCHEDULE 5c.

REVENUE 1903-4.

INCOME.

Interest :—

	Estimate.	Actual.
On purchase moneys	\$6,975 45	\$6,768 90
On Loans	12,564 67	12,759 97
On Debentures	10,848 79	11,027 38
On Bank balances	250 00	413 14
Medical Faculty, on cost of new building	3,000 00	3,000 00
Medical Faculty, on equipment	1,200 00	1,200 00

Rents :—

University Park	13,466 40	13,559 79
Business properties	3,530 00	3,492 70
School of Science Site	925 00	925 00
Medical Faculty	1,900 00	1,900 00
City of Toronto Payment	6,000 00	6,000 00
Legislative Grant General	7,000 00	7,000 00
Wild Lands sold	2,000 00	1,347 86
Sundry Earnings, Land	1,000 00	993 00
University and College Fees	56,000 00	59,850 40
	\$126,650 31	\$130,238 14
Less interest upon Trust Funds reserved	9,778 59	9,784 27
	\$116,871 72	\$120,453 87

OUTLAYS.

Appropriations as per estimates adopted by the Board on 10th Oct. 1903 ..	\$150,663 50
Less unused thereof (see summary below)	2 09
	\$150,661 41
Specific Grant for 1903-4	\$30,207 54

SCHEDULE 5d.

REVENUE EXPENDITURES YEAR 1903-4.

	Appropriations.	Un-foreseen.	Un-used.
1. Salaries and Pensions :			
(a) Salaries	\$96,667 00		\$223 80
(b) Pensions	1,800 00		600 00
2. Bursar's Office	750 00		91
3. Registrar's Office	2,250 00		45 36
4. Vice-Chancellor's Office	750 00		65 00
5. President's Office	1,280 00		154 40
6. Law Costs	1,500 00		705 77
7. General Incidentals	1,250 00		14 75
8. Insurance	2,000 00		
9. Telephones	325 00		35 00
10. Convocation Expenses	800 00	\$188 96	
11. Examinations	7,765 00	21 04	
12. Library	3,695 00		42 53
13. Grounds	3,800 00	18 98	
14. Main Building	5,450 00	1,095 65	
15. Biological Department :			
(a) Maintenance of Building	2,600 00	\$63 37	
(b) Maintenance of Department	3,319 50	6 88	
16. Physiological Department	6,032 00	1,368 00	
17. Psychological Department	850 00		96
18. Mathematics	50 00	9 31	
19. Political Science	60 00		53 30
20. History	250 00		13 11
21. Italian and Spanish	25 00		12
22. Advertising University	600 00		175 40
23. Incidentals, University	200 00		42 95

24. University College Departments :

Classics	155 00	25 05	
English	200 00		
French	30 00		
German	175 00		1 54
Oriental Literature	25 00		
Stationery	75 00		15 85
Printing	75 00		17 42
Advertising	100 00		34 32
Incidentals	250 00		7 25
25. Gymnasium and Students' Union	2,000 00		53 55
26. Dining Hall	500 00		
27. University Press	2,010 00		353 49
28. Herbarium Grant		300 00	
29. Educational Association Reception		257 45	
	\$149,663 50	\$3,654 69	\$2,656 78
30. Unforeseen	1,000 00	1,000 00	
	\$150,663 50	\$2,654 69	\$2,654 59
Unused of Unforeseen	2 09		\$2 09
Total expenditure from Revenue 1903-4	\$150,661 41		

SCHEDULE 6.

SITE LANDS, BUILDINGS AND CONTENTS, 30 JUNE, 1904.

Lands set apart for the use of University	\$475,361 40	
Main Building and Residence	450,000 00	
Museum Building	73,085 42	
Biological Building	56,659 88	
Library Building	110,015 65	
Chemical Building	77,469 88	
Gymnasium Building	36,288 46	
Medical Building	125,000 00	
Y.M.C.A. Hall	1 00	\$1,403,881 69
Library Books, etc.	129,272 35	
Museum, including fittings and biological apparatus	24,691 02	
Chemical apparatus	9,975 90	
Mineralogical and Geological apparatus	8,212 16	
Physical apparatus	15,900 00	
Psychological apparatus	1,800 00	
Mathematical apparatus	600 00	
Physiological apparatus, new building	17,039 61	\$207,491 04
Main Building furniture	3,841 20	
Residence furniture	1,537 49	5,378 69
		\$1,616,751 42
Return of 30th June, 1903	\$1,621,448 82	
Additions to Library during year	5,861 10	
Equipment New Medical Building	23,439 61	
	\$1,650,749 53	
Yearly allowance for depreciation of Library	\$3,998 11	
Portion of equipment of Medical Faculty side of new building to be repaid in yearly instalments with 4 per cent. interest	30,000 00	
	33,998 11	\$1,616,751 42

SCHEDULE 7.

UNPRODUCTIVE LANDS.

Hoskin Ave. and Devonshire Place survey	\$176,356 70	
Unsurveyed land east of Devonshire Place survey	217,667 53	
Block 131 feet s. s. Bloor by 200 feet on e. s. North Drive	31,251 00	
Lots 51, 52 and 54 s. s. Bloor west of North Drive	44,398 50	
Lots on College Ave. Nos. 3, 6, 8 and 9	36,864 00	
Lots in Port Hope	6,557 50	
Lots near Belleville	1,790 00	
Farm Lands	152 00	
College Block, King st., Toronto, balance of account after deductions of all sales to date	239,375 40	\$754,402 63

TRANSACTIONS DURING 1903-4.

Sales of 2½ acres Port Hope lands for.....	\$542 50	
Sale of portion of College block, cor. Adelaide and Simcoe Streets, 186 x 186 feet, for.....	23,000 00	
	<u>\$23,542 50</u>	
Return of 30th June, 1903.....	777,945 13	\$754,402 63

SCHEDULE 8.

LEASED LANDS.

Victoria College site.....	\$1 00	
Wycliffe College site.....	2,500 00	
Observatory site.....	1 00	
School of Science site.....	18,500 00	
Land leased to City of Toronto.....	120,000 00	
Park lands.....	239,080 00	
Toronto business properties.....	78,038 10	
Caradoc Farm.....	2,000 00	
Cavan Farm.....	4,500 00	
Valuation of lands.....		\$464,620 10
St. George Street house and lands.....	\$8,031 85	
Cumberland house.....	14,842 75	
Thorne house.....	4,750 00	\$27,624 60
Wycliffe College pavement.....		1,131 60
Park and business ground rents past due.....	\$335 56	
Accrued but not due, park rentals.....	6,412 78	
City of Toronto payment.....	1,500 00	
Business ground rents, accrued but not due.....	833 84	
		<u>\$9,082 18</u>
		\$502,458 48

NOTE.

Park Hospital building removed from site of new Science building.....	\$24,982 16	
Wycliffe pavement instalment.....	33 50	
Decrease in revenue outstanding.....	132 69	
	<u>\$25,148 35</u>	
Purchase of Thorne dwelling upon leased park lot No. 25.....	4,750 00	
Reduction during 1903-4.....	\$20,398 35	
Return of 30th June 1903.....	522,856 83	
Return of 30th June, 1904.....		\$502,458 48

SCHEDULE 9.

INVESTMENTS 30 JUNE, 1904.

Debentures and Municipal Bonds.....	\$275,123 67	
Interest accrued but not due.....	5,513 92	
	<u>\$280,637 59</u>	
Loans secured by mortgages upon real property.....	\$246,946 09	
Advanced as premiums upon Fire Policies.....	76 38	
Interest past due.....	1,640 86	
Interest accrued but not yet due.....	3,621 11	
	<u>\$252,284 44</u>	
Unpaid purchase money upon land sales.....	\$144,093 10	
Interest past due.....	79 75	
Interest accrued but not yet due.....	1,363 41	
	<u>145,536 26</u>	

Medical Faculty equipment advance.....	\$28,984 73	
Hamilton Cataract Power and Light Co. shares.....	2,000 00	
		30,984 73
Cheques to be received from Provincial Government: For difference between cost of two departments, \$42,433.18, and amount received on account, \$40,000.....		
Grant for 1903-4 revenue deficit as shown in Schedule 5c.....	\$2,433 18	
Deposit in Canadian Bank of Commerce.....	30,207 54	
University Press, earning unpaid.....	67,709 24	
	414 78	
		100,764 74
		\$810,207 76

TRANSACTIONS 1903-4.

Inwards.

Debenture Collections.....	\$13,705 49	
Loans repaid.....	29,058 22	
Purchase moneys collected.....	31,498 55	
Decrease in accrued revenue.....	342 20	
Portion of annual payment of \$2,215.27 by Medical Faculty upon advance, applied in reduction of principal.....	1,015 27	
Withdrawn from Canadian Bank of Commerce.....	235,666 36	
		\$311,286 09

Outwards.

Medical Faculty advance.....	\$30,000 00	
Land Sales.....	23,542 50	
Hamilton Cataract Power and Light Co. shares.....	2,000 00	
Deposits in Canadian Bank of Commerce.....	273,931 21	
Excess in Provincial Treasury cheques to be deposited.....	13,826 35	
Excess in uncollected earnings of University Press, past due.....	129 51	
		343,429 51
Increased Outstandings.....		32,143 48
Return of 30th June, 1903.....		778,064 28
Return of 30th June, 1904.....		\$810,207 76

SCHEDULE 10.

Fees

Actual receipts during 1903-4.....		\$59,770 90
Deduct arrears of 30th June, 1903, collected and included in above amount.....	\$46 12	
5 Library Fees written off.....	10 00	
8 Laboratory Fees written off.....	14 00	
1 Examination Fee written off.....	14 00	
		84 12
		\$59,686 78
Add arrears of 30th June, 1904 (See note below).....		163 62
		\$59,850 40

NOTE.

Arrears of 30th June, 1904—

Agricultural arrears on 30th June, 1903.....	\$24 62	
Examination outlay, 1903-4.....	299 00	
17 Degrees.....	170 00	
	\$493 62	
Received from Department of Agriculture.....	425 00	
		\$68 62
1. Registration Fee.....		36 00
1 Library Fee.....		2 00
1 Degree Fee.....		10 00
3 Examination Fees.....		34 00
3 Laboratory Supply Fees.....		13 00
Arrears of 30th June, 1904.....		\$163 62

APPENDIX II.

FEES RECEIVED 1903-4.

FACULTY OF ARTS.

Subject.	1st year.	2nd year.	3rd year.	4th year.	Miscellaneous.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
College fees	5,411 00	4,394 00	3,645 00	3,596 00	50 00
Penalties	29 00	14 00	19 00	22 00	
Dispensations and post graduate registration	40 00	70 00	35 00	25 00	30 00
Honor certificates			1 00		41 00
Matriculation	38 00				436 00
Ad eundem	10 00	10 00	10 00	10 00	10 00
Examination	3,077 00	3,197 00	2,783 00	2,463 00	1,213 00
Degrees				1,440 00	420 00
Chemical supply	94 00	142 00	107 00	47 00	
Mineralogical supply		21 00	16 00	12 00	
Biological supply	90 00	124 50	176 00	185 00	5 00
Physical supply	45 00	39 00	105 00	67 00	2 00
Psychological supply			36 00	81 00	
Physiological supply				20 00	
Library	444 00	356 00	316 00	294 00	
Medical Students { Matriculation	5 00	23 00	5 00	10 00	
Ad eundem		30 00	30 00	70 00	
Examination	1,344 00	1,015 00	1,425 00	1,300 00	508 00
Degrees				2,100 00	50 00
Chemical supply	398 00	357 00			
Biological supply	260 00	351 00			
Physiological supply		252 00			
Payment by Medical Faculty for Arts subjects	1,834 00	1,770 00			
School of Practical Science students	1,464 00	589 00			
Laboratory Instruction occasional students	196 00	32 00			160 00
Totals	14,774 00	12,786 50	8,659 00	11,772 00	2,925 00

DEPARTMENTAL FEES.

Subject.	Law.	Dentistry.	Engineering and Applied Science.	Music.	Pharmacy.	Pedagogy.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Matriculation	120 00	180 00		5 00	355 00	
Examination	260 00	899 00	220 00	1,730 00	850 00	40 00
Degrees	260 00	885 00	210 00		690 00	20 00
Certificates				389 25		
Totals	640 00	1,964 00	430 00	2,124 25	1,897 00	60 00

SUMMARY OF 1903-4 FEES.

First Year	\$14,774 00
Second Year	12,786 50
Third Year	8,659 00
Fourth Year	11,772 00
Miscellaneous	2,925 00
Law	640 00
Dentistry	1,964 00
Engineering	430 00
Music	2,124 25
Pharmacy	1,897 00
Pedagogy	60 00
Agriculture	425 00
Gymnasium	1,314 15
Totals	\$59,770 90

CLASSIFICATION OF SERVICES.

College Fees	\$17,096 00
Penalties	84 00
Dispensation and post graduate registration.....	200 00
Honor Certificates	431 85
Matriculation	1,177 00
Ad Eundem	180 00
Examination	22,276 00
Degrees	6,075 00
Chemical Supply	1,140 00
Mineralogical Supply	79 00
Biological Supply	1,191 50
Physiological Supply	272 00
Physical Supply	258 00
Psychological Supply	117 00
Library	1,410 00
Medical Faculty, payments for Arts subjects.....	3,604 00
School Practical Science Students	2,053 00
Laboratory Instruction, occasional students	388 00
Agriculture	425 00
Gymnasium	1,314 15
	<hr/>
	\$59,770 90

APPENDIX III.

DEPARTMENTS MAINTAINED BY THE GOVERNMENT.

SUMMARY.

	Estimate.	Expenditure.
1. Chemistry :		
Salaries	\$10,084 00	\$10,081 00
Maintenance	4,280 50	4,279 51
2. Physics :		
Salaries	11,500 00	11,500 00
Maintenance	5,000 00	4,999 22
3. Mineralogy and Geology :		
Salaries	6,026 00	6,025 00
Maintenance	5,235 00	5,223 45
4. Examination expenses :		
Share of Chemistry and Physics.....	325 00	325 00
	<hr/>	<hr/>
	\$42,449 50	\$42,433 18

DETAILS.

SALARIES.

(1.) Chemistry.

W. B. Lang	Professor	\$2,800 00
W. Lash Miller	Associate Professor	2,100 00
F. B. Allan	Lecturer	1,275 00
F. B. Kenrick	Lecturer	1,275 00
C. M. Carson	Assistant	500 00
R. E. DeLury	Assistant	500 00
E. Forster	Junior Assistant	350 00
E. H. Jolliffe	Junior Assistant	350 00
E. Redpath	Caretaker and attendant..	504 00
J. Smith	Boy cleaner, etc.....	177 00
G. Donkin	Fireman	250 00
		<hr/>
		\$10,081 00

(2.) *Physics.*

James London	Professor	\$3,200 00	
W. J. London	Associate Professor	1,900 00	
J. C. McLennan	Associate Professor	1,900 00	
O. A. Chant	Lecturer	1,800 00	
E. F. Burton	Ass'tant Demonstrator	800 00	
W. P. Near	Lecture Assistant	500 00	
A. Thomson	Class Assistant	300 00	
A. G. McPhedran	Class Assistant	125 00	
M. E. Gowland	Class Assistant	100 00	
H. F. Dawes	Class Assistant	75 00	
T. S. Plaskett	Mechanician	800 00	
			\$11,500 00

(3.) *Mineralogy and Geology.*

A. P. Coleman	Professor of Geology	\$700 00	
T. L. Walker	Professor of Mineralogy, etc	2,675 00	
W. A. Parks	Lecturer	1,350 00	
H. L. Kerr	Class Assistant	500 00	
M. T. Culbert	Class Assistant	500 00	
Wm. Stewart	Attendant	300 00	
			6,025 00
Total Salaries, three departments			\$27,606 00

MAINTENANCE.

(1.) *Chemistry.*

(a) Maintenance of Building :		
Elias Rogers Coy., fuel		\$643 19
Consumers' Gas Coy., gas		237 52
Toronto Electric Light Coy., electric current		91 05
City Treasurer, water		129 45
Mrs. Repath, cleaning		99 00

Repairs and Incidentals :

R. Farthing, shelving, repairing windows, etc.	135 60
Harrison and Robertson, repairs to plumbing, etc.	138 30
H. T. Brown, ventilators, etc.	77 87
Wm. Cane, re-glazing, varnishing, etc.	30 50
Grant-Hamilton Oil Coy., oil, etc.	47 30
R. W. Hollinger, soap and matches	12 10
Fletcher Mfg. Coy., tinware, etc.	9 50
Can. Gen. Elec. Coy., electric supplies	6 40
United Factories, brooms, etc.	4 67
R. Robertson, repairing brickwork	1 78
Alpha Bicycle Coy., repairing lawn mower	2 00
Douglas Bros., replacing flag pole	7 20
D. Pike Coy., ensign	10 00
E. Repath, washing towels, etc.	22 55

Fitting up Phys. Chem. Laboratory :

R. Farthing, partition, etc.	90 15
Harrison and Robertson, plumbing	60 98

Extra lockers :

R. Farthing, making 87 lockers	574 50
--------------------------------------	--------

	\$2,431 61
Less paid by Professor Lang, share of repairs from Students' account	127 25
	\$2,304 36

(b) Maintenance of Department :

Kaehler and Martini, chemicals, glassware and balances	\$1,358 17
C. W. Irwin, freight, etc.	90 40
Ontario Rubber Coy., tubing and corks	72 88
Freyseug Cork Coy., corks	18 95
Beaver Flint Glass Coy., test tubes, etc.	55 11
Elmer and Amend, test tubes and chemicals etc.	11 13
Map and School Supply Coy., chemicals, etc.	44 70
Baird and Tatlock, clamps, etc.	43 86
Treloar, Blashford and Coy., castings	12 06
Aikenhead Hardware, hardware	81 15
Jas. W. Paton, glass	3 88
J. G. Ramsey and Coy., photo materials	2 10
Can. Gen. Elec. Coy., lamps	5 20
United Factories, brushes	25 26
Harrison and Robertson, wiring re balances	38 80
J. J. McLaughlin, gas	19 35
Office Specialty Coy., cards	8 00
Brown Bros., blank books and stationery	136 63
United Typewriter Coy., rent of typewriter, etc.	31 85
University Press, stationery, printing and office supplies	81 07
R. E. DeLury, drafting	2 00
J. W. McBain, research work and petty supplies	106 30

Physical Chemistry sub-department :

J. G. Ramsey and Coy., photo materials.....	44 40
Fletcher Mfg. Coy., repairing cabinet, etc.....	39 35
J. W. Smith and Sons, table.....	10 00
Harrison and Robertson, wiring, plumbing, etc.....	99 00
Can. Gen. Elec. Coy., motor and elec. supplies.....	35 48
T. H. Robinson, chronograph.....	9 50
Fensom Elevator Coy., wire.....	7 50
Oastrucci Coy., models.....	8 00
Beaver Flint Glass Coy., tubes.....	1 50
Map and School Supply Coy., cups.....	60
Lake Simcoe Ice Coy., ice.....	7 25
S. Dushman, ice.....	25
Aikenhead Hardware, brass tubing, etc.....	4 74
E. Farthing, lock, etc.....	4 15
International Instrument Coy., crucible.....	1 38
Elliott and Coy., acid.....	27
R. E. Walker and Coy., cloth.....	2 53
C. W. Mack, rubber stamp.....	2 00
W. K. Simpson, turning armature.....	1 50
C. W. Irwin, freight.....	3 50
Park Bros., mounting photos.....	2 00
Brown Bros., cardboard.....	1 00
United Typewriter Coy., paper and rent of typewriter.....	11 20
Miss L. A. Wilson, typewriting.....	11 00
Miss F. B. Arnoldi, typewriting.....	6 00
G. Donkin, labor.....	6 00
W. Lash Miller, petty disbursements.....	32 02
	<hr/>
	\$2,600 97
Less paid by Professor Lang, from Students' account.....	625 82
	<hr/>
	\$1,975 15

(2.) Physics.

Canadian General Electric Coy., storage cells and jars, ammeter, elec. supplies, etc....	375 54
W. G. Pye and Coy., apparatus.....	268 96
Weston Electric Instrument Coy., apparatus.....	257 27
Richard Muller-Uri, apparatus.....	190 24
Siemens and Halske, apparatus.....	122 56
L. Golas, apparatus.....	116 87
R. W. Paul, apparatus.....	98 95
Max. Kohl, apparatus.....	33 16
Cambridge Scientific Instrument Coy., apparatus.....	65 68
Carl Zeiss, apparatus.....	66 36
George Bartels, apparatus.....	32 92
Ph. Pellin, apparatus.....	31 30
Newton and Coy., apparatus.....	27 69
Hartman and Braun, apparatus.....	12 82
R. Fuess, apparatus.....	65 43
Williams Brown and Coy., apparatus.....	9 10
Brown and Sharp Mfg. Coy., apparatus.....	16 00
E. Leybold's Nachfolger, apparatus.....	3 82
A. C. Cossor, apparatus.....	7 93
C. W. Irwin, freight and brokerage.....	112 62
Dom. Express Coy., express.....	60
Lyman Bros. Coy., chemicals, etc.....	133 20
Elmer and Amend, chemicals, etc.....	42 82
Buchler and Coy., chemicals, etc.....	3 20
Fletcher Mfg. Coy., cylinders and vessels.....	55 20
Wheeler and Bain, cylinders and vessels.....	22 15
John T. Wilson, cylinders and vessels.....	7 25
W. J. McGuire and Coy., galvanised tanks, etc.....	34 35
Map and School Supply Coy., laboratory supplies.....	34 07
Aikenhead Hardware, castings and hardware.....	84 79
Trelor, Blashford and Coy., castings and hardware.....	4 79
Jas. Robertson Coy., lead.....	6 00
Morrison Brass Co., tubes and spheres.....	14 70
Booth Copper Coy., tubes and spheres.....	1 27
Ontario Rubber Coy., corks and tubing.....	27 01
Rice Lewis and Son, steel rules, drills and hardware.....	43 78
Wantless and Coy., ston watches.....	10 00
Art Metropole, compasses and drawing matts.....	17 03
Chicago Laby. Supply Co., weights.....	3 68
Rogers Elec. Coy., sine rods, switches, etc.....	4 54
G. L. English and Coy., mineral.....	1 61
Ward's Nat. Science Establishment, mineral.....	2 28
Nalder Bros. Coy., mirrors.....	3 31
Canada Plate Glass Coy., glass.....	20
Imperial Glass Works, glass.....	20
J. McCausland and Son, glass.....	3 85
Moore and Orr, plating.....	1 00
Standard Silver Coy., plating.....	2 70

S. May and Coy., billiard balls.....	4 00
Michie and Coy., candles.....	75
G. Sparrow and Coy., tank.....	7 50
A. T. Thompson and Coy., slides.....	14 50
W. J. Loudon, photometer, etc.....	16 27
J. G. Ramsey and Coy., photo materials.....	22 30
G. and J. Murray, lights.....	2 20
E. Harris Coy., turpentine and brushes.....	10 20
Lake Simcoe Ice Coy., ice.....	10 50
R. Simpson Coy., towels.....	2 30
E. Dinmis and Son, laboratory tables and shelving.....	100 72
E. Robertson, cutting in wall.....	1 62
J. Wicksey, fitting up rooms, etc.....	4 72
Office Specialty Coy., cards.....	7 30
Brown Bros., stationery and supplies.....	15 15
Arthurs and Apted, slip covers.....	4 75
University Press, printing pamphlets, etc.....	29 80
Board Fire Underwriters, inspection of wiring.....	2 00
J. C. McLennan, petty disbursements.....	114 15
C. A. Chant, petty disbursements.....	25 00
A. Thomson, class assistance.....	50 00
D. A. Walker, class assistance.....	50 00
H. P. Dawes, class assistance.....	25 00
T. S. Plaskett, mechanician, half month, June, 1903.....	33 34

Less pamphlets sold.....	\$30 00	\$3,035 02
Less scrap iron sold.....	5 80	
		35 90

Share of maintenance Main Building.....	\$2,999 22
	2,000 00
	\$4,999 22

(a) Mineralogy :

(3.) Mineralogy and Geology.

Apparatus :

Swift and Son, microscopes.....	\$416 86
Peter Stoe, apparatus.....	192 03
Voigt and Hochgesang, apparatus.....	68 41
F. Krantz, models.....	52 62
McKelvey and Birch, blowpipes.....	43 55
McDonald and Willson, elec. appliances.....	4 50
C. W. Irwin, freight and brokerage.....	67 50

Maintenance :

Peter Stoe, laboratory supplies.....	\$141 90
Chandler and Massey, laboratory supplies.....	22 29
Lyman Sons and Coy., charcoal, etc.....	22 71
G. L. English and Coy., minerals.....	39 53
Voigt and Hochgesang, minerals.....	5 28
Rice Lewis and Son, carborundum.....	2 92
Ontario Rubber Coy., tubing, etc.....	2 77
Beaver Flint Glass Coy., tubes.....	5 30
Freyseng Cork Coy., corks.....	1 10
Dom. Paper Box Coy., trays.....	24 25
Art Metropole, drawing materials.....	7 50
J. G. Ramsey and Coy., photo materials.....	1 46
Queen City Plate Glass Coy., glass.....	1 90
Wyness Plating Coy., plating.....	2 00
Chas. Potter, repairing spectroscopes.....	3 00
Fletcher Mfg. Coy., broom, etc.....	1 96
John Hillock and Coy., partitions.....	6 00
C. W. Irwin, freight.....	9 73
C. W. Richardson, cartage.....	50
United Typewriter Coy., rent of typewriter.....	16 00
University Press, stationery and printing.....	7 44
Miss E. A. McMicking, books.....	2 30
Wm. Stewart, extra services as attendant.....	40 00
T. L. Walker, laboratory disbursements.....	84 71
T. L. Walker, travelling expenses.....	185 55

Museum Cases and Specimens :

Chas. Rogers and Sons, cases.....	\$272 00
Office Specialty Coy., cases.....	48 00
Wm. Cane, locks for cases.....	37 70
J. Hillock and Coy., bass wood.....	20 64
Peter Stoe, specimens.....	169 10
Mineralien Niederlage, specimens.....	164 05
G. B. Frazer, specimens.....	90 80
D. Blatz, specimens.....	32 96
F. Krantz, specimens.....	19 76
Foot Mineral Coy., specimens.....	33 00
Eimer and Amend, specimens.....	5 11
Alex. Parks, specimens.....	8 00
Jas. Robertson, collecting specimens.....	2 00

R. E. Hore, services classifying specimens	56 00
R. B. Stewart, services classifying specimens	26 00
University Press, labels and cards	13 00
R. G. McLean, labels and cards	7 25
C. W. Irwin, freight	13 48
T. L. Walker, disbursements	5 00
Share of maintenance, Biological Building	100 00

\$2,608 35

(b) Geology :

Apparatus :

Chas. Potter, theodolite, compass, etc.	\$275 14
A. T. Thompson and Coy., reflectoscope	50 25
Art Metropole, metric scales and instruments	29 79
Chandler and Massey, eye pieces, etc.	59 00
A. E. Williams Coy., motor	119 00
Office Specialty Coy., cabinets	164 00
F. Krantz, fossils	359 63
J. Townsend, fossils	150 00
Ward's Nat. Science Establishment, fossils	129 15
R. F. Damon, fossils	157 42
Emile Deyrolles, fossils	62 89
B. Sturtz, fossils	502 44
C. W. Irwin, freight and brokerage	41 17
Robinson and Heath, freight and brokerage	2 40

Supplies and Sundries :

J. G. Ramsey and Coy., camera and photo materials	\$53 42
Art Metropole, drawing materials	13 40
Dominion Paper Box Coy., trays	20 25
Can. Paper Box Coy., boxes	44 00
A. T. Thompson and Coy., slides	36 00
Chandler and Massey, chemicals	6 49
R. F. Damon, specimens	7 33
C. Southworth, specimens	9 00
Can. Gen. Elec. Coy., lamps	2 00
Rogers Elec. Coy., lamps	6 00
Rice Lewis and Son, leather bags	23 85
Office Specialty Coy., cards	24 25
University Press, cards and printing	8 19
Miss E. A. McMicking, books	9 00
Brown Bros., binding	4 00
Carswell Coy., binding	5 55
Wm. Cane, book case, etc.	13 50
United Typewriter Coy., typewriter	125 00
Can. Typewriter Coy., paper	2 40
Robinson and Heath, freight	14 01
O. W. Irwin, freight	1 95
Canadian Express Coy., freight	1 92
C. W. Richardson, cartage	50
A. E. Gibson, labelling specimens, etc.	30 00
A. L. Carruthers, labelling specimens, etc.	39 00
W. A. Parks, petty disbursements	11 81

\$2,615 10

(4.) Examination Expenses.

Share of Examination expenses for Departments of Chemistry and Physics..... \$335 00

APPENDIX IV.

SUMMARY OF REVENUE EXPENDITURES

YEAR 1903-4.

	Appropriations.	Un-foreseen.	Un-used.
1. Salaries and Pensions :			
(a) Salaries	\$96,667 00		\$223 80
(b) Pensions	1,800 00		600 00
2. Bursar's Office	750 00		91
3. Registrar's Office	2,250 00		45 36
4. Vice-Chancellor's Office	750 00		65 00
5. President's Office	1,280 00		154 40
6. Law Costs	1,500 00		705 77
7. General Incidentals	1,250 00		14 75
8. Insurance	2,000 00		
9. Telephones	325 00		35 00
10. Convocation Expenses	800 00	188 96	
11. Examinations	7,765 00	21 04	
12. Library	3,695 00		42 53
13. Grounds	3,800 00	18 98	
14. Main Building	5,450 00	1,095 65	

15. Biological Department :

(a) Maintenance of Building.....	2,600 00	363 37	
(b) Maintenance of Department.....	3,319 50	6 88	
16. Physiological Department.....	6,032 00	1,368 00	
17. Psychological Department.....	850 00		96
18. Mathematics.....	50 00	9 31	
19. Political Science.....	60 00		53 30
20. History.....	250 00		13 11
21. Italian and Spanish.....	25 00		12
22. Advertising, University.....	600 00		175 40
23. Incidentals, University.....	200 00		42 95
24. University College Departments :			
Classics.....	155 00	25 05	
English.....	200 00		
French.....	30 00		
German.....	175 00		1 54
Oriental Literature.....	25 00		
Stationery.....	75 00		15 85
Printing.....	75 00		17 42
Advertising.....	100 00		34 32
Incidentals.....	250 00		7 25
25. Gymnasium and Students' Union.....	2,000 00		53 65
26. Dining Hall.....	500 00		
27. University Press.....	2,010 00		353 49
28. Herbarium Grant.....		300 00	
29. Educational Association Reception.....		257 45	
	\$149,663 50	\$3,654 69	\$2,656 78
30. Unforeseen	1,000 00	1,000 00	
	\$150,663 50	\$2,654 69	\$2,654 69
Unused of Unforeseen.....	2 09		2 09
Total expenditure from Revenue 1903-4.....	\$150,661 41		

I. SALARIES, UNIVERSITY AND UNIVERSITY COLLEGE.

(EXCLUDING DEPARTMENTS SUSTAINED BY GOVERNMENT.)

1. Faculty, University of Toronto.

Dr. James Loudon.....	President.....	\$2,300 00	
Dr. E. Ramsay Wright.....	Vice-President.....	400 00	\$2,700 00

MODERN HISTORY AND ETENOLOGY.

Geo. M. Wrong	Professor	3,200 00	3,200 00
---------------------	-----------------	----------	----------

POLITICAL SCIENCE.

James Mavor.....	Professor.....	3,200 00	
McGregor Young.....	Prof. of Constitutional and International Law.....	1,700 00	
A. H. F. Lefroy.....	Prof. of Roman Law, Jur- isprudence, etc.....	875 00	
S. M. Wickett.....	Lecturer.....	1,000 00	6,775 00

MATHEMATICS.

Alfred Baker.....	Professor.....	\$3,200 00	
A. T. DeLury.....	Associate Professor.....	1,900 00	
J. C. Fields.....	Special Lecturer.....	1,500 00	
L. K. Fife.....	Fellow.....	225 00	6,825 00

BIOLOGY.

R. Ramsay Wright.....	Professor.....	3,200 00	
B. A. Bensley.....	Lecturer, Zoology, etc.....	1,400 00	
W. H. Piersol.....	Lecturer Biology, etc.....	1,100 00	
J. H. Faull.....	Lecturer Botany.....	1,075 00	
R. B. Thomson.....	Instructor.....	500 00	
M. D. McKichan.....	Lecture Assistant, etc.....	250 00	
M. H. Embree.....			
F. J. Munn.....			
A. C. Hendrick.....			
W. J. O. Malloch.....			
A. J. Mackenzie.....	Class Assistants at \$50....	450 00	
E. A. McCulloch.....			
A. H. Adams.....			
A. Henderson.....			
J. D. Loudon.....			
H. M. McNeill.....	Class Assistant.....	25 00	
A. Pride.....	Sub-Curator of Museum..	750 00	

D. J. Clark	Attendant and caretaker..	500 00	
W. Cambridge	Attendant in Laboratory..	120 00	
Mahlangeni	Attendant in Laboratory..	65 20	
			9,435 20

PHYSIOLOGY.

A. B. Macallum	Professor (including arrears)	3,300 00	
F. H. Scott	Demonstrator	1,000 00	
W. J. O. Malloch	} Class Assistants at \$75....		
S. H. Westman		225 00	
A. C. Hendrick			4,525 00

ITALIAN AND SPANISH.

W. H. Fraser	Professor (including arrears)	2,800 00	
F. J. A. Davidson	Lecturer	750 00	
E. J. Sacco	Instructor, Italian	400 00	
			3,950 00

PHILOSOPHY.

August Kirschmann	Professor	2,500 00	
Frederick Tracy	Lecturer	1,675 00	
A. H. Abbott	Lecturer and Laboratory		
	Assistant	1,100 00	
T. R. Robinson	Laboratory Assistant	200 00	
			5,475 00
			\$42,885 20

2. Faculty, University College.

Dr. M. Hutton	Principal	400 00	400 00
---------------------	-----------------	--------	--------

ETHICS.

J. G. Hume	Professor	3,200 00	3,200 00
------------------	-----------------	----------	----------

GREEK.

Maurice Hutton	Professor	3,200 00	
A. Carruthers	Associate Professor	1,800 00	
			5,000 00

LATIN.

J. Fletcher	Professor	3,200 00	
W. S. Milner	Lecturer and Assoc. Prof.		
	Anc. History	1,900 00	
G. W. Johnston	Lecturer	1,675 00	
			6,775 00

ORIENTAL LITERATURE.

J. F. McCurdy	Professor	3,200 00	
R. G. Murison	Lecturer	1,675 00	
			4,875 00

ENGLISH.

W. J. Alexander	Professor	3,200 00	
D. E. Keys	Assoc. Prof. Anglo-Saxon..	1,900 00	
			5,100 00

FRENCH.

John Squair	Professor (including arrears)	2,800 00	
J. H. Cameron	Associate Professor	1,900 00	
St. Elme de Champ	Instructor	1,000 00	
			5,700 00

GERMAN.

W. H. Vandersmissen	Professor (including arrears)	2,800 00	
G. H. Needler	Lecturer	1,800 00	
P. Toews	Instructor	1,000 00	
			5,600 00
			\$36,650 00

3. Administrative Departments and General Service.

BURSAR'S OFFICE.

J. E. Berkeley Smith	Bursar	\$2,400 00	
F. A. Moure	Accountant	1,400 00	
H. J. Bolitho	Fees Clerk	700 00	
			\$4,500 00

REGISTRAR'S OFFICE.

James Brebner	Registrar	1,900 00	
Miss A. W. Paterson	Stenographer	450 00	
Miss F. Wells	Stenographer (8 months)	200 00	
			2,550 00

LIBRARY.

H. H. Langton	Librarian	2,200 00	
Miss M. H. Buchan	1st Assistant	550 00	
Miss F. B. Arnoldi	2nd Assistant	500 00	
Miss Hester Young	3rd Assistant (Cataloguer)	500 00	
Miss A. Rosebrough	Delivery Clerk	280 00	
Miss G. Buchan	Delivery Clerk	100 00	
S. H. Fussell	Caretaker	500 00	
			4,630 00

GYMNASIUM.

A. Williams	Instructor	800 00	
George Hare	Caretaker	575 00	
S. P. Biggs	Secretary Athletic Association	200 00	
			1,576 00

GENERAL SERVICE.

D. B. Dick	Architect	100 00	
Robt. Martin	Bedel (with free house)	650 00	
F. Hamner	Engineer (with house and fuel)	576 00	
A. McConnell	Fireman	280 00	
J. Wicksey	Carpenter, etc	620 00	
C. E. Bradshaw	Janitor	500 00	
J. Laballister and wife	Cleaners Main Building	525 00	
Wm. Berry	Cleaner Main Building	238 00	
S. White	Boy messenger (10 weeks)	45 00	
G. Thompson	Boy messenger (28 weeks)	118 00	
			3,652 00
			\$16,908 00

Total (excluding departments sustained by Government) \$96,443 20

2. BURSAR'S OFFICE.

Grand and Toy, account books, stationery and office supplies	\$82 10
Brown Bros., account books	33 00
Office Specialty Coy., labels, etc	2 60
The Bursar, postage, \$145; petty disbursements, \$135.62	280 62
University Press, printing estimates, etc	50 77
W. H. Cross, auditor's fee	300 00
	\$749 09

3. REGISTRAR'S OFFICE.

University Press, stationery	\$166 31
Grand and Toy, office supplies	71 60
Office Specialty Coy., desk and chair	42 20
Hutchison and Coy., blank book	6 50
Newsome and Gilbert, typewriter supplies	9 60
Dominion Typewriter Exchange, typewriter supplies and repairs	13 65
Remington Typewriter Coy., repairs	4 95
C. M. Richardson, cartage	2 75
The Registrar, petty disbursements	100 00
The Bursar, postage supplied	600 00
University Press, printing	324 64
University Press, printing calendar and curricula	862 44
	\$2,204 64

4. VICE-CHANCELLOR'S OFFICE.

Hon. Chas. Moss, Honorarium as Vice-Chancellor	\$400 00
Hon. Chas. Moss, expense indemnity	285 00

\$685 00

5. PRESIDENT'S OFFICE.

W. H. Fraser, allowance as Secretary to President	\$200 00
N. Y. Evening Post, subscription	9 10
Weekly Sun, subscription (2 years)	2 00
Grand and Toy, office supplies	2 45
J. C. McLennan, screen for ante-room	8 00
Arthurs and Apted, circulars	13 25
University Press, printing and stationery	160 63
The Bursar, postage supplied	22 00
Bell Telephone Coy., messages	2 00
The President, travelling expenses	548 97
Prof. Ramsay Wright, travelling expenses, representing President	45 80
Prof. J. C. McLennan, travelling expenses, representing President	87 00
Prof. A. B. Macallum, travelling expenses, representing President	24 50

\$1,125 60

6. LAW COSTS.

John A. Paterson, K.C., legal services as solicitor to University	\$354 79	
Less mortgage discharges, etc., paid by the parties concerned	44 00	
		\$310 79
A. H. Marsh, K.C., services re Trinity federation		125 00
H. J. Browne, surveying and plans		26 00
N. E. Butcher and Coy., reporting		19 10
F. A. Benson, services re Port Hope lots		43 99
T. G. Gillespie, services Cavan farm		5 35
London Guarantee and Accident Coy., premium on fidelity bonds of officers		264 00
		\$794 23

7. GENERAL INCIDENTALS.

Stinson and Hollway, commissions on sales at U. C. College block	800 00
Stinson and Hollway, commission on purchase of Thorne house	118 75
Alumni Association, grant towards expenses of deputation to Government	200 00
J. C. McLennan, draftings re Observatory, etc.	10 00
G. Hagen, night watchman (9 weeks)	94 50
W. Russell, night watchman (temporary)	12 00
	\$1,235 25

8. INSURANCE.

Premiums on General Schedule, 3 years, from 1st Jany., 1904 :		
London Assurance	\$201 72	
Sun Insurance Office	201 72	
Quebec Fire Assurance Coy.	201 72	
Manchester Assurance Coy.	201 72	
Norwich Union Fire Ins. Soc'y.	201 72	
Mercantile Insurance Coy.	201 72	
Perth Mutual Fire Ins. Coy.	201 72	
North British and Mercantile Coy.	201 72	
Alliance Assurance Coy.	403 44	
Liverpool and London and Globe Ins. Coy.	403 45	
Queen City Fire Ins. Coy.	403 45	
Scottish Union and National Ins. Coy.	403 45	
Etna Insurance Coy.	403 45	
Hartford Fire Insurance Coy.	403 45	
Royal Insurance Coy.	403 45	
Western Assurance Coy.	403 45	
British America Assurance Coy.	403 45	
Less rebate.	394 92	
	8 53	
Boiler Inspection and Insurance Coy.	300 00	
	5,149 88	
Less share paid by Medical Fac'y.	441 00	
		\$4,708 88
Casual Premiums :		
British America Assurance Coy.	\$122 60	
Western Assurance Coy.	32 50	
	155 10	
Less sundry rebates	53 70	
		\$101 40
		\$4,810 28
Charged to Revenue 1903-4 (balance carried forward)		\$2,000 00

9. TELEPHONES.

Bell Telephone Coy., Telephone Service :		
Bursar's office	\$50 00	
President and Registrar's office	50 00	
Chemical Building	50 00	
Printing Bureau	50 00	
Main Building	45 00	
Library	45 00	
		\$290 00

10. CONVOCATION EXPENSES.

G. Harcourt and Son, hoods	\$87 50
Robt. Simpson Coy., decorations and loan of carpets	83 50
48th Highlanders, band	45 00
E. Dinnie and Son, extension to platform, etc.	39 24
F. Williams, signs	4 20
J. Laballister, cleaning	10 50
F. Lindner, labor	9 00
T. Hare, labor	1 50
W. Russell, labor	1 50
C. M. Richardson, cartage of chairs, etc.	88 90
Reverie Bros., engraving invitations	43 12
H. Webb Coy., refreshments, garden party	175 00
Alumni Association, share of banquet to graduating class	400 00
	\$988 96

11. EXAMINATIONS.

(a) REMUNERATION TO EXAMINERS :

Arts :

G. W. Johnston.....	\$13 50
E. L. Horning.....	18 25
D. R. Keys.....	12 00
A. E. Lang.....	12 00
R. E. Wright.....	18 00
E. G. Murison.....	12 00
E. I. Badgley.....	6 25
C. A. Chant.....	6 00
J. Mavor.....	6 00
M. Hutton.....	6 00
A. L. Langford.....	6 00
A. J. Bell.....	6 25
O. P. Edgar.....	6 25
A. P. Misener.....	18 00
G. M. Wrong.....	6 00
T. B. Robinson.....	6 00
J. C. Robertson.....	6 00
A. Carruthers.....	6 00
J. Squaif.....	6 00
A. Baker.....	6 00
W. S. Milner.....	7 00
A. T. DeLury.....	6 00
H. J. Dawson (expenses).....	2 00
W. J. Alexander (expenses).....	70
J. Squair, revising lists.....	25 00
W. H. Fraser, revising lists.....	25 00
J. C. Robertson, revising lists.....	25 00

\$273 20

Medicine :

H. W. Aikins.....	\$60 00
A. Primrose.....	80 00
C. B. Shuttleworth.....	80 00
J. M. MacCallum.....	100 00
B. D. Rudolf.....	60 00
C. L. Starr.....	60 00
A. E. Gordon.....	60 00
G. A. Bingham.....	60 00
H. T. Macchell.....	80 00
K. O. McIlwraith.....	60 00
J. J. MacKenzie.....	100 00
W. Oldright.....	60 00
G. Silverthorn.....	60 00
N. H. Beemer.....	80 00
F. B. Allan.....	80 00
C. W. Carson.....	60 00
F. B. Kenrick.....	60 00
C. A. Chant.....	100 00
A. B. Macallum.....	100 00
W. H. Piersol.....	80 00
B. A. Bensley.....	100 00
W. T. Stuart.....	20 00
O. P. Lusk.....	20 00
O. Sheard.....	20 00
F. Fenton.....	20 00
H. O. Parsons.....	40 00
F. Le M. Grasett.....	40 00
H. B. Anderson.....	40 00
C. A. Temple.....	40 00
A. McPhedran.....	20 00
G. A. Peters.....	20 00

\$1,860 00

Law :

C. A. Moss.....	40 00
H. E. Rose.....	40 00

\$80 00

Engineering and Applied Science :

T. L. Walker.....	20 00
A. P. Coleman.....	20 00
G. B. Mickle.....	20 00
R. W. Angus.....	20 00
J. Galbraith.....	20 00
O. H. C. Wright.....	20 00
T. B. Rosebrugh.....	20 00

\$140 00

Dentistry :

A. Primrose.....	\$40 00
G. A. Bentley.....	40 00
D. Clark.....	40 00
S. Moyer.....	40 00
W. C. Trotter.....	100 00
G. S. Martin.....	40 00

F. N. G. Starr	60 00	
G. Silverthorn	40 00	
O. E. Pearson	80 00	
E. C. Abbott	60 00	
		\$540 00
Agriculture :		
M. Cumming	\$80 00	
W. P. Gamble	40 00	
W. J. Alexander	20 00	
Miss A. G. Rowsome	20 00	
W. Lochhead	23 00	
H. H. Dean	20 00	
F. C. Harrison	23 00	
W. H. Day	20 00	
H. L. Hutt	20 00	
W. G. Milligan	33 00	
		\$299 00
Musie :		
Albert Ham	\$314 40	
C. L. M. Harris	87 50	
W. E. Fairclough	100 00	
A. S. Vogt	71 00	
J. D. A. Tripp	47 80	
J. E. P. Aldous	33 00	
W. O. Forsyth	20 00	
D. Ross	12 00	
E. W. Schuch	50 00	
B. Tandy	13 34	
R. Pococke	10 00	
H. Puddicombe	48 20	
St. John Hyttenrauch	13 50	
Thos. Martin	27 66	
F. S. Welsman	92 72	
W. B. Young	32 30	
W. H. Ballard	10 90	
F. W. Merchant	10 70	
B. W. Dickie	5 00	
J. Henderson	6 00	
W. W. Rutherford	2 00	
W. A. Bradley	2 00	
J. W. Mitchell	3 00	
W. J. Fenton	3 00	
W. Tytler	2 00	
Miss E. C. Fleming	2 20	
W. N. Bell	2 18	
J. E. Stone	3 00	
J. J. Bell	2 06	
H. W. Brown	2 15	
G. A. Mayberry	2 15	
W. A. Hanna	2 20	
Mrs. Alfred Watt	7 00	
P. J. Illsley	2 00	
G. W. Johnston	5 00	
J. Macmillan	2 12	
I. B. Wallwin	1 50	
A. W. Partridge	1 00	
Miss A. W. Patterson (expenses)	8 55	
		\$1,061 13
Pharmacy :		
O. F. Heebner (incl. expenses)	\$175 42	
G. Chambers	60 00	
A. Moir	60 00	
P. L. Scott	60 00	
		\$355 42
Pedagogy :		
F. Tracy	\$21 25	
F. W. Merchant	20 00	
		\$41 25
Matriculation :		
W. S. Milner	\$40 00	
H. J. Bolitho	36 00	
W. Tilley (attendant)	15 50	
		\$91 50
Household Science :		
Miss A. L. Laird		\$20 00
Physical Drill :		
W. J. O. Malloch	\$6 00	
A. Williams	6 00	
		\$12 00

Presiding Examiners and Attendants (general)

A. C. Hendrick	\$37 50
W. H. Piersol	34 00
J. C. Robertson	20 00
R. G. Murison	57 50
G. W. Johnston	35 00
E. I. Badgley	34 50
A. P. Misener	16 00
W. G. Smith	19 00
Miss L. Salter	20 50
J. H. Kerr	121 89
W. J. Baird	28 45
G. E. Anderson	20 00
W. J. Graham	34 00
D. Sinclair	33 50
E. Toser	2 00
D. K. Armbrust	4 00
J. Hill	37 50
D. Ritchie	27 00
W. H. B. Ketohen	27 00
F. W. Broadfoot	21 00
C. J. Wilson	15 50
J. McEachren	29 00
W. Tilley	77 50
L. Gianelli	26 00
A. Hunter	18 50
W. E. Archer	4 50
C. E. Clark	40 50
B. Place	24 00
A. Harvey	7 00

\$872 84

Apportionment of last group :

Arts	\$589 59
Medicine	191 75
Law	3 00
Dentistry	25 50
Music	20 50
Pharmacy	42 50

\$872 84

Total Examiners' remuneration and expenses \$5,646 34

(b) STATIONERY AND SUPPLIES FOR EXAMINATIONS :

University Press	\$202 54
Grand and Toy	12 25
Hutchison and Coy., parchments	225 60
Might Directories, lists of names	20 01
C. M. Richardson, cartage of papers	12 40
F. Finch, hire of rig for cartage of papers	6 00
Gourlay, Winter and Leeming, hire of pianos	8 00

\$486 70

(c) PRINTING EXAMINATION PAPERS AND CLASS LISTS :

University Press	\$1,987 75
Less papers sold	9 75

\$1,978 00

Government share for Departments of Chemistry and Physics \$8,111 04

325 30

\$7,786 04

12. LIBRARY.

(a) MAINTENANCE OF BUILDING :

Elias Rogers Coy., fuel	\$562 12
City Treasurer, water	33 43
Mrs. Long, cleaning	170 00
Wm. Beers, repairing roof	16 50
Wheeler and Bain, repairing roof	14 99
Wm. Cane, repairing locks	2 25
J. McIntosh, oiling shelves	4 00
Grant Hamilton Oil Coy., oil, etc.	9 55
E. B. Eddy Coy., toilet paper	6 30
Elec. Service Coy., regulating heating apparatus	10 60
R. Dinnis and Son, lumber	20 07
Lyman Bros. Coy., soda	45
Rice Lewis and Son, chair tips	3 16
Mrs. Fussell, washing towels	10 05

\$863 47

(b) GENERAL LIBRARY APPROPRIATION, BOOKS, ETC.:

F. A. Brockhaus, books	\$1,973 85
Cazenove and Son, books	1,281 91
H. LeSoudier, books	1,053 28
B. Seiber, books	192 71
H. Welter, books	158 49
R. Friedlander and Bohn, books	20 25
Chas. Scribner and Sons, books	283 89

Gustav Fock, books	90 42
M. Nijhoff, books	10 06
H. Laurens, books	5 00
Morang and Coy., books	25 79
Carswell Coy., books	8 98
R. B. Thomson, books	13 20
Dominion Book Store, books	3 75
G. M. Wrong, books	3 00
Vannevar and Coy., books	1 00
Virtue and Coy., books	42 00
Annual Review Pub. Coy., books	4 00
A. H. Clark and Coy., books	21 66
A. S. Clark, books	5 03
Chas. Evans, books	15 10
Historical Pub. Coy., books	23 35
P. S. King and Son, books	27 34
Macmillan and Coy., books	4 53
Univ. of Chicago, books	5 03
Can. Law Book Coy., books	8 00
G. F. Burton, books	2 00
Estate E. A. McMicking, books	10 35
F. H. Revell Coy., books	80
P. G. Roy, books	3 16
N. Picard et Fils	1 10
D. R. Jack, books	1 50
N. O. Cote, books	2 00
Librairie Beauchemin, books	1 78
Univ. of State of N. Y., books	8 36
Journal of Physical Chemistry, books	32 15
Pruneau and Kirouac, books	6 85
A. Britnell, books	2 50
J. Britnell, books	1 00
Algoma Colportage Mission, books	50
Rev. N. J. Sirois, books	50
Copp-Clark Coy., books	45
W. H. Guild and Coy., periodicals	215 51
Gauthier Villars, periodicals	64 91
Can. Law Review, periodicals	5 00
Educational Monthly, periodicals	2 00
Ontario Library Association, periodicals	2 00
Geographical Congress, periodicals	5 10
U. S. Govt. Printing Office, reports	12 95
Brown Bros., binding	167 03
Robinson and Heath, freight	111 88
Toronto Public Library, freight	41 30
Library Bureau, label holders	5 16
The Librarian, petty disbursements	50 00
The Librarian, re Univ. Historical Studies	300 00
University Press, stationery and printing	65 34
United Typewriter Coy., supplies	2 85
C. Gripton, repairing rubber stamps	3 25
Might Directories, directory	6 00
Roberts and Son, hanging portraits	5 50

\$6,422 40

Less chargeable to :

Medical Fund	\$300 00
Goldwin Smith Fund	118 41
Local Lectures Fund	15 00
Library Insurance Fund	3,388 99

3,822 40

\$2,600 00

(c) CLERICAL ASSISTANCE :

Miss G. Buchan, assistance	\$115 50
Miss A. Rosebrugh, assistance	22 00
E. E. DeLury, assistance	30 00
Miss B. Warner, typewriting, etc.	3 25
A. Downey, typewriting, etc.	18 25

\$189 00

\$3,652 47

13. GROUNDS.

R. Robertson, drains and culverts for new roads	\$562 40
Salmon Lumber Coy., lumber	27 86
R. Dinnis and Son, lumber	84 32
John McDonald, broken stone, etc.	22 50
John Wood, sod	79 50
Wm. Simpson, sidewalks	106 20
Wm. Cane, repairs to slat walks, etc.	36 00
Carbon Light and Power Coy., lamp and post	35 68
Steele, Briggs Seed Coy., lawn mower, hose, etc.	59 15
Lewis Le Grow, extending water main	38 72
Jas. McIntosh, painting fence, etc.	15 25
I. Wardell and Son, moving cottages	145 00
D. Pike Coy., repairs to flag pole	25 00
C. M. Richardson, cartage	32 65

J. Hurst, flowers	5 00	
Illsley and Horn, plough	5 00	
J. A. Strachan, sharpening tools	1 80	
Aikenhead Hardware, rope	6 04	
Ontario Rubber Coy., rubber boots	3 75	
Wm. McCully, Policeman	111 60	
of Police, services of constables	6 00	
The Bursar, fortnightly pay lists, laborers	1,887 06	
		\$3,295 48

New Granolithic Walks :

A. Gardner and Coy., walks	\$1,270 00
R. Robertson, retaining walls	694 00
W. J. McGuire and Coy., railing for walls	59 50

\$2,023 50

Portion charged to this year's account, (balance carried forward)..... 623 50

\$3,818 98

14. MAIN BUILDING.

W. J. McGuire and Coy., repairs to plumbing, radiators, electrical work, etc	\$582 41
R. E. H. Bickner, roller grates	202 50
R. Robertson, repairing brickwork, etc.	190 26
Tor. Elec. Light Coy., wiring, etc.	71 25
Forbes Roofing Coy., repairing roofs	228 01
Jas. McIntosh, painting and glazing	256 77
Chas. Rogers and Sons Coy., chairs	90 00
R. Dinnis and Son, lumber	257 44
Wheeler and Bain, repairing eave troughs, and sundries	31 28
Fletcher Mfg. Coy., hardware, etc.	16 90
Rice Lewis and Son, hardware, etc.	41 03
Aikenhead Hardware, hardware, etc.	22 21
McColl Bros. Coy., soap, cleaning materials, floor oil, etc	71 25
G. W. Grant and Coy., engine oil and supplies	36 35
Michie and Coy., toilet soap, candles, etc.	41 20
L. Duncan, floor cloths and towels	26 28
John Taylor and Coy., soap	5 19
Robt. Simpson Coy., shades, etc.	27 60
J. Wicksey, new flooring, etc.	27 20
O. Menzies, carpentering	18 90
Wm. Cane, locks, keys and repairs	63 00
Jas. Morrison Coy., gas cocks and piping	19 54
Can. Gen. Elec. Coy., lamps, etc.	32 04
Map and School Supply Coy., thermometer	1 50
Wm. McKendry, repairing clocks	4 50
Stinson and Coy., cleaning flues	5 70
M. N. Dafee, brushes	3 25
Joss and Coy., brushes	1 50
University Press, placards	76
G. E. Doran, repairs to messenger's bicycle	4 25
J. Parrott, repairs to messenger's bicycle	1 50
Mrs. Laballister, washing towels	62 00
H. Hamner, sundry labor	9 00
A. McConnell, sundry labor	6 00
Wm. Berry, sundry labor	10 50
J. Laballister, sundry labor	7 50

Repairs to Bedel's house :

Wm. Beers, shingling and adding new room	427 45
W. J. McGuire and Coy., drain and plumbing	164 44
R. Robertson, air bricks, etc.	8 72
Wheeler and Bain, eave troughs	18 95
Elias Rogers Coy., fuel	4,237 42
City Treasurer, water	307 24
Tor. Elec. Light Coy., electric current	860 13
Consumers' Gas Coy., gas	44 72

\$8,545 65

Government share for Dept. of Physics..... 2,000 00

\$6,545 65

15. BIOLOGICAL DEPARTMENT.

(a) MAINTENANCE OF BUILDING :

Elias Rogers Coy., fuel	\$1,359 03
Consumers' Gas Coy., gas	126 30
Tor. Elec. Light Coy., electric current	107 12
City Treasurer, water	125 96

Furnishings and Cleaning Materials :

Fletcher Mfg. Coy., house furnishings	68 77
T. Eaton Coy., oil cloth and shades	21 70
John Kay Son and Coy., shades	4 95
Elliott and Son Coy., lettering, etc.	12 90
Albert Whale, covering chairs	6 00

R. Dinnis and Son, trestles, etc.	12 00
Aikenhead Hardware, hardware	10 16
Canada Paper Coy., toilet paper	10 37
Can. Gen. Elec. Coy., elec. supplies	3 21
Tor. Elec. Light Coy., elec. supplies	40
Grant-Hamilton Oil Coy., soap and oil	21 61
Chandler and Massey, chemicals	4 05
Ontario Lime Association, lime	60
John Catto and Son, floor cloths and du ters	6 50
University Press, stationery, etc.	15 69
Prof. Wright, petty disbursements	25 70

Repairs :

Jas. McIntosh, kalsomining	110 00
Bennett and Wright, repairing plumbing	83 33
Douglas Bros., repairing roof, etc.	71 50
Fensom Elevator Coy., repairing hoist	8 46
R. Robertson, repairing boilers	47 36
Chas. Rogers and Sons Coy., repairing furniture	72 75
R. Dinnis and Son, lumber	9 80
Prof. Wright, petty disbursements	20 50

Cleaning, etc.:

Mrs. Clark, charwoman	120 00
C. W. Plowman, boy cleaner	80 00
Prof. Wright, to pay sundry women	147 15

Lockers :

Chas. Rogers and Sons Coy., new lockers	350 00
---	--------

Government share for Dept. of Mineralogy

\$3,063 37

100 00

\$2,963 37**(b) MAINTENANCE OF DEPARTMENT :****Laboratory Supplies :**

Chandler and Massey, laboratory materials, etc	\$107 21
Evans and Sons, chemicals	12 85
Schering and Glats, chemicals	5 57
J. G. Ramsey and Coy., photo materials	31 20
Art Metropole, drawing materials	3 10
Friedlander and Sohn, books	48 68
E. A. McMicking, books	11 55
Carl Zeiss, lens	3 70
Aikenhead Hardware, sundries	2 40
Wm. Cane, brackets	1 00
S. Percy and Son, plaster of paris	5 00
R. Dinnis and Son, lumber	6 00
J. W. Paton, enamel	80
Canada Paper Coy., pulp	1 00
J. A. Simmers, seeds	1 03
Can. Gen. Elec. Coy., carbons	1 22
J. Catto and Son, cloth	63
Miss Jackson, diagrams	8 60
J. H. Faull, laboratory expenses	9 90
C. M. Richardson, cartage	5 00
Eastman Machine Coy., repairing lamp	1 50
Robinson and Heath, freight	50
University Press, stationery and printing	6 58
The Bursar, post cards	1 00
Prof. Wright, petty disbursements	44 49

Museum Supplies :

P. Wytzman, specimens	40 00
F. Ziegler, specimens	24 00
Atkinson's Nat. Science Establishment, specimens	10 70
C. P. Railway, freight	12 04
Robinson and Heath, freight	21 14
Chas. Rogers and Sons Coy., drawers and locks	83 75
Jas. Iredale, label holders	15 00
Aikenhead Hardware, glue	3 00
W. J. McGuire and Coy., hanging tusks	73 10
J. R. G. Murray, drafting and labelling	53 25
University Press, labels	2 38
C. M. Richardson, cartage	50
Prof. Wright, disbursements	7 53

Marine and Lake Laboratories :

B. A. Bensley, expenses	181 78
J. J. Mackenzie, expenses	50 00
R. E. Wright, expenses	65 00

Students' Laboratory Supplies :

Appropriation transferred to Biological Students' Supply Fund	869 50
---	--------

Catalogue Preparation :		
W. H. F. Addison, 10 months' work	250	00
Microscopes and Projection Apparatus :		
J. A. Carveth Coy., microscopes	111	00
J. B. Colt Coy., lantern	87	00
Carl Zeiss, apparatus	800	00
Botanical Appropriation :		
Chandler and Massey, incubator, auto-clave, etc	205	00
J. H. Faull, supplies	40	00
	\$3,326	38

16. PHYSIOLOGICAL DEPARTMENT.

Maintenance and Laboratory Supplies :		
Chandler and Massey, laboratory materials, etc.	\$140	82
Baker and Adamson Coy., chemicals, etc.	55	88
Evans and Sons, chemicals, etc.	47	09
Lyman Bros. Coy., chemicals, etc.	37	43
Paterson and Foster, chemicals, etc.	10	07
Canada Chemical Coy., chemicals, etc.	48	80
Eimer and Amend, chemicals, etc.	29	68
J. M. Shaw, frogs	90	30
J. A. Fontaine, frogs	32	00
Ontario Rubber Coy., tubing, etc.	49	68
Central Electric Coy., supplies for laboratory	27	70
Art Metropole, drawing materials	4	07
V. A. Russell, dishes	8	50
Pletcher Mfg. Coy., dishes	8	25
Freyseng Cork Coy., corks	9	70
G. B. Meadows, wire cloth	27	40
Rice Lewis and Son, hardware	6	99
Echoley Bros., shelves, etc.	15	10
Gustav Fock, books and diagrams	57	97
Grand and Toy, files, etc.	3	15
Chas. Rogers and Sons Coy., mirrors	4	50
G. E. Wilson, supplies	8	05
University Press, stationery and printing	7	28
H. Merryday, cleaning	5	00
Robinson and Heath, freight	81	94
T. Motton, expressage	2	65
C. M. Richardson, cartage	1	50
Prof. Macallum, disbursements	35	87
Apparatus :		
Harvard Physiological Apparatus, per Prof. W. T. Porter	3,463	72
Robinson and Heath, freight	61	25
Maintenance Medical Building :		
Medical Faculty, for share due by Physiology, of the following services :		
Fuel	\$3,170	39
Gas	96	46
Electric current	255	19
Water	395	53
Cleaning	1,420	77
Portion of repairs, etc.	715	82
Caretaker's salary	720	00
Engineer and Asst. Engineer	770	00
	\$7,544	16
2-5ths of this sum		3,017 66
		\$7,400 00

17. PSYCHOLOGICAL DEPARTMENT.

F. Zimmermann, philosophical apparatus	\$96	25
Gustav Fock, books	26	56
Wm. Gnad, books	21	37
Wm. Engelmann, books	11	43
Miss E. A. McMioking, books	4	70
A. M. Shannon, pamphlet cases	24	00
S. Percy and Coy., glass, etc.	5	66
Tor. Plate Glass Coy., glass, etc.	4	60
E. Harris Coy., glass, etc.	1	00
B. and H. B. Kent, frames, etc.	19	50
W. J. Freeland, films	4	00
Can. Gen. Elec. Coy., elec. supplies	6	12
Steinberger-Hendry Coy., crayons	2	30
R. Dinnis and Son, lumber	3	95
Jas. McKenney, methylated spirit	3	15
J. J. Pollett, cloth	3	60
Rice Lewis and Son, colors, etc.	2	57
Citizens' Gas Control Coy., governor	4	20
Runtin, Reid Coy., wrappers	1	75
University Press, stationery	7	43
W. R. Archer, assistance in laboratory	50	00
Prof. Kirschmann, petty disbursements	45	00

Optical Apparatus :

A. Thompson and Coy.....	270 50
Schmidt and Haensch	230 00

18. MATHEMATICS.

University Press, stationery and printing	\$13 81
H. J. Dawson, reading papers	28 00
J. T. Birchard, reading papers	17 50

\$59 31

19. POLITICAL SCIENCE.

University Press, stationery, etc.....	\$6 70
--	--------

20. HISTORY.

A. F. Barr, reading essays and papers.....	\$50 00
E. H. Oliver, reading essays and papers	50 00
H. H. Langton, reading essays and papers	35 00
J. S. Carstairs, reading essays and papers	29 00
W. L. Grant, reading essays and papers.....	25 00
Dr. Primrose, obtaining material for historical sketch	25 00
University Press, stationery	8 24
Copp, Clark Coy., maps	14 00
C. E. Bradshaw, express	65

\$236 89

21. ITALIAN AND SPANISH.

A. J. Reading, lantern slides	\$12 60
Miss E. A. McMicking, books	10 78
United Typewriter Coy., paper.....	1 50

\$24 88

22. ADVERTISING (UNIVERSITY.)

Alumni Association, annual grant	\$200 00
Alumni Association, advertisement in Univ. Monthly	100 00
Educational Monthly, advertisement	16 00
"Torontonensis," advertisement.....	15 00
Toronto Globe, advertisement	12 60
Toronto Mail and Empire, advertisement	12 60
Toronto World, advertisement	8 40
Canadian Almanac, advertisement	10 00
Canadian Music Trades Journal, advertisement.....	20 00
H. H. Langton, preparation of article for "Technical World"	30 00

\$424 60

23. INCIDENTALS (UNIVERSITY.)

R. W. Williams, engrossing addresses and resolutions of condolence, and filling in diplomas.....	\$81 96
P. W. Ellis and Coy., engraving medals	6 45
Dr. Hans Gadov, address at Biological Department.....	50 00
University Press, sundry printing, etc.....	18 64

\$157 95

24. UNIVERSITY COLLEGE DEPARTMENTS.

Classics :	
E. H. Oliver, tutorial assistance.....	\$100 00
A. Carruthers, lantern slides	50 35
A. J. Reading, lantern slides	29 70

\$180 05

English :

J. S. Carstairs, reading essays	\$100 20
Miss A. R. Riddell, reading essays	60 00
E. S. Jenkins, reading essays	40 00

\$200 00

French :

A. J. Reading, lantern slides	\$29 10
Miss E. A. McMicking, books	90

\$30 00

German :

P. Toews, lectures in Scientific German	\$150 00
T. Eaton Coy., desk	21 00
A. J. Reading, lantern slides	90
University Press, paper	1 56

\$173 46

Oriental Literature :

J. F. McCurdy, books	\$25 00
----------------------------	---------

Stationery, etc.:

University Press, supplies	\$9 15
The Bursar, postage, supplied to Registrar.....	50 00

\$59 15

Printing :

University Press.....	\$57 58
-----------------------	---------

Advertising :

Toronto Globe, advertisement	\$16 80
Toronto Mail and Empire, advertisement	16 80
Toronto World, advertisement	11 20
Toronto Telegram, advertisement	2 52
Toronto News, advertisement	2 10
Toronto Star, advertisement	1 26
"Torontonensis," advertisement	15 00

\$65 66

Incidentals :

Mrs. M. White, physical instruction to women students	\$75 00
E. Dinnis and Son, on account women's lockers	50 00
Office Specialty Coy., table, etc	25 50
Gourlay, Winter and Leeming, hire of pianos.....	36 00
Toronto Weekly Railway Guide, weekly time table	5 20
W. P. Near, assistance with lantern	5 00
C. W. Richardson, cartage	22 05
Chief Fire Brigade, firemen at conversations.....	16 00
Principal Hutton, travelling expenses	8 00

\$242 75

25. GYMNASIUM AND STUDENTS' UNION.

Elias Rogers Coy., fuel	\$535 12
City Treasurer, water	127 02
Consumers' Gas Coy., gas	\$98 72
Less paid by Student Societies.....	31 88

66 84

Mrs. Catherine Wood, cleaning	63 13
-------------------------------------	-------

Repairs and Incidentals :

W. J. McGuire and Coy., shower baths, repairing plumbing, etc	695 07
Jas. McIntosh, painting and glazing	280 10
E. Dinnis and Son, window frames, etc	28 90
Rice Lewis and Son, netting and hardware.....	36 86
Aikenhead Hardware, wheelbarrow and shovels.....	14 60
R. Robertson, repairing brickwork	1 26
Le Page Door Check Coy., repairing spring.....	2 00
Canada Paper Co., toilet paper	10 00
McColl Bros. Coy., floor oil, soap and soda.....	16 30

Apparatus and Labor :

Wm. Cane, renewing gymnastic appliances, etc	47 05
A. M. Connell, fireman's services	25 30
	\$1,949 25
Less fines for broken chairs	2 80

\$1,946 45

26. DINING HALL.

University Dining Hall Committee, grant towards maintenance.....	\$500 00
--	----------

27. UNIVERSITY PRESS.

Plant Account :

Amount appropriated for reduction of balance of cost of presses and type.....	\$650 00
---	----------

Additions to type and equipment :

Miller and Richard, type.....	\$176 85
John Haddon and Coy., type	122 34
Rice Lewis and Son, steel bed plates.....	16 14
John Whitfield and Coy., cutting bed plates.....	21 50
C. Wilson and Son, weights, etc	5 00
	341 83

Rent of House :

Gordon and Fowler, 12 months' rent	\$360 00
--	----------

Alterations and Repairs :

W. J. McGuire and Coy., plumbing	202 96
Jas. McIntosh, painting and papering	101 45
W. J. Hynes, plastering	61 18
R. Robertson, brickwork	59 00
Wheeler and Bain, tinsmithing	14 62
Aikenhead Hardware, weather strip, etc.....	10 22
E. Dinnis and Son, shelving, etc.....	38 75
Wm. Cane, repairing storm sashes	8 50
Tor. Elec. Light Coy., connecting service.....	62 61
	\$559 29

General Expenses :

Fortnightly pay lists, wages of printers.....	\$2,823 88
Brown Bros., paper.....	1,380 23
Canada Paper Coy., paper.....	102 86
Buntin, Reid and Coy., paper.....	230 45
Barber and Ellis Coy., paper.....	116 26
W. J. Gage and Coy., paper.....	125 51
Hart and Riddell, paper.....	1 13
Newsome and Coy., paper.....	1 40
Can. Printing Ink Coy., ink.....	10 45
Wm. Nurse, rollers.....	4 45
Littlejohn and Vaughan, electros.....	12 80
Alexander Engraving Coy., zinc etchings.....	25 00
Alexander and Cable, lithographing.....	1 50
Clark Litho. Coy., lithographing.....	45 00
Whaley Royce and Coy., music plates.....	17 75
G. Parker, music plates.....	1 25
Royle Engrav. Coy., wood cuts, etc.....	32 40
Standard Embossing Coy., embossing.....	3 05
West and Gillis, folding and binding.....	349 17
Wilson, Munroe and Coy., folding and binding.....	8 50
Lawson and Wilson, folding and binding.....	55 95
W. A. Blashford, folding and binding.....	50 00
Anderson Ptg. Coy., binding and presswork.....	354 50
R. G. McLean, composition and printing.....	535 55
Miln-Bingham Ptg. Coy., printing.....	312 80
J. F. Ross, mailing tubes.....	7 50
O. C. Custance, steel die.....	5 50
Rice Lewis and Son, steel plates, etc.....	9 02
J. Haddon and Coy., printers' supplies.....	11 76
Miller and Richard, printers' supplies.....	2 04
O. W. Mack, rubber stamps.....	6 65
Art Metropole, drawing pins, etc.....	4 14
Grand and Toy, cards.....	5 35
Bain Book Coy., cards.....	2 25
Dom. Distributing Coy., window cards.....	2 20
G. B. Meadows, stand.....	1 00
R. Dinnis and Son, type trays and cabinets.....	29 14
Wanless and Coy., repairing clock.....	75
Consol. Elec. Coy., turning commutator.....	4 90
T. B. t. wiring.....	12 54
G. and J. Murray, benzine.....	1 37
Aikenhead Hardware, hardware.....	6 48
Wm. Cane, iron rods.....	2 00
J. Laballister, cleaning rooms.....	5 00
J. Hurst, stove.....	10 00
A. Welch, stove.....	6 61
Elias Rogers Coy., fuel.....	39 30
City Treasurer, water.....	8 80
Westman and Baker, moving presses.....	23 25
Haynes Transfer, cartage.....	27 45
Lester Storage Coy., cartage.....	10 00
Fraser Storage Coy., cartage.....	50
T. W. Langstone, petty expenses.....	4 55

\$6,850 89

8,762 01

725 00

Less reserved from Revenue 1902-3 for completion of calendar....

\$8,037 01

Receipts :

Alumni Association.....	\$90 41
Athletic Association.....	79 93
Anglo-Canadian Music Pub. Association.....	15 00
A. Baker.....	2 61
E. F. Burton.....	2 26
J. Brebner.....	7 10
B. A. Bensley.....	1 21
Brown-Searle Ptg. Coy.....	1 15
W. E. Carr.....	1 27
Convocation Hall Com.....	22 43
Dining Hall Committee.....	65
Dinner Committee (Med. Fac.).....	11 40
Executive Class, '07.....	1 00
Engineer Corps.....	24 50
W. H. Fraser.....	99
Faculty Union.....	16 73
Gourlay, Winter and Leeming.....	15 00
M. Hutton.....	1 91
H. H. Love.....	2 60
W. E. Lang.....	7 35
Hon. Chas. Moss.....	2 09
J. Mavor.....	3 87
Math. and Physical Society.....	3 75
R. Martin.....	1 40
J. C. McLennan.....	5 93
Methodist Book Room.....	48 80
Medical Faculty.....	675 11

Ontario Med. Association	83
Prov. Synod of Canada	39 08
Royal College of Dental Surgeons	27 17
R. A. Reeve	11 61
St. Margaret's College	99 38
St. Alban's School	1 83
School of Practical Science	290 36
Students' Account, Biology	96 28
J. Squair	2 82
P. Toews	1 05
Toronto Golf Association	1 66
F. Tracy	67 01
Univ. Studies	29 61
W. H. Vance	80
"Varsity"	6 63
Victoria College	174 92
Whaley Boyce and Coy	13 50
Wycliffe College	11 01
E. Ramsay Wright	83
Y. M. C. A.	33 79
McGregor Young	2 58

University Departments :

Bursar's Office	50 77
Registrar's Office	1,353 39
President's Office	160 63
Examinations	2,190 29
Library	65 34
Main Building	76
Biological Department	24 95
Physiological Department	7 28
Psychological Department	7 43
Mathematical Department	13 81
Pol. Science Department	6 70
History Department	8 24
Incidentals	18 64
Univ. College Departments	68 29

Government Departments :

Chemistry	81 07
Physics	29 80
Mineralogy and Geology	29 23

Accounts receivable	5,965 72
	414 78

6,380 50

\$1,656 51

28. HERBARIUM GRANT.

E. B. Thomson, services and material towards construction	\$300 00
---	----------

29. EDUCATIONAL ASSOCIATION RECEPTION.

Univ. Dining Hall, refreshments	\$150 00
Glionna's Orchestra, music	21 00
T. S. Plaskett, elec. wiring	7 00
Tor. Elec. Light Coy., arc lights	7 50
Mackenzie and Coy., moving paintings	10 00
Miss A. W. Patterson, postage	5 65
C. W. Richardson, cartage	17 30
D. F. Williams, service in cloak rooms	7 00
J. Laballister, labor and attendance	8 00
F. Hanmer, labor and attendance	8 00
J. Wicksey, labor and attendance	5 00
C. E. Bradshaw, labor and attendance	5 00
W. Russell, labor and attendance	2 00
A. McConnell, labor and attendance	2 00
G. Thompson, labor and attendance	2 00

\$257 45

APPENDIX V.

MEDICAL FACULTY.

RECEIPTS.

Fees :

First year	\$14,363 00	
Less Arts portion	1,834 00	
		\$12,529 00
Second year	\$12,676 00	
Less Arts portion	1,770 00	
		10,906 00
Third year		16,568 00
Fourth year		15,176 00

Miscellaneous	1,995 00
Registration	780 00
Examination	1,688 00
Psychology	540 00
Interest on Bank Account	577 31
New Medical Building, share of maintenance from Physiological Department	3,017 56
New Medical Building, rent of rooms :	
Prov. Board of Health	\$500 00
Toronto Med. Society	20 00
	<hr/> 520 00
	\$64,296 97

EXPENDITURE.

<i>Summary.</i>	
Salaries	\$37,142 38
Maintenance :	
Anatomical Department	\$5,810 48
Depts. other than Anatomy	9,357 40
New Building	7,043 01
General expenses	4,943 70
	<hr/> 27,154 59
	\$64,296 97

DETAILS.

Salaries.

<i>Professors :</i>	
A. Primrose, Anatomy	\$2,000 00
J. J. Mackenzie, Pathology, etc.	2,000 00
I. H. Cameron, Surgery and Clinical Surgery ..	910 25
F. Le M. Grasett, Surgery and Clinical Surgery ..	949 65
G. A. Peters, Surgery and Clinical Surgery	910 25
L. Teskey, Surgery and Clinical Surgery	949 65
A. McPhedran, Medicine and Clinical Medicine ..	910 25
J. L. Davison, Clinical Medicine	949 65
C. Sheard, Preventive Medicine	949 65
J. A. Temple, Operative Obstetrics, etc.	910 25
A. H. Wright, Obstetrics	910 25
W. Oldright, Hygiene	606 70
J. F. W. Ross, Gynaecology	856 70
J. M. MacCallum, Pharmacology, etc.	633 10
H. B. Anderson, Clinical Pathology	633 10
N. A. Powell, Med. Jurisprudence	364 02
E. A. Reeve, Ophthalmology, etc.	364 02
G. E. McDonagh, Laryngology, etc.	303 91
W. H. Ellis, Toxicology	253 24
G. S. Ryerson, Ophthalmology, etc.	242 68
G. H. Burnham, Ophthalmology, etc.	<hr/> \$17,556 97
<i>Associate Professors :</i>	
G. A. Bingham, Clin. Anat. and Clin. Surg. :	\$633 10
A. M. Baines, Clin. Medicine	633 10
J. T. Fotheringham, Clin. Medicine	633 10
W. P. Caven, Clin. Medicine	606 70
H. W. Aikins, Anatomy	606 70
H. A. Bruce, Clin. Surgery	485 40
D. J. G. Wishart, Laryngology, etc.	303 84
F. N. G. Starr, Clin. Surgery	364 10
J. A. Amyot, Pathology	364 10
W. B. Thistle, Clin. Medicine	364 10
E. D. Rudolf, Medicine, etc.	364 10
A. E. Gordon, Medicine, etc.	364 10
E. J. Dwyer, Medicine, etc.	364 10
C. L. Starr, Orthopaedics	254 87
H. T. Machell, Obstetrics, etc.	500 00
W. T. Stuart, Medical Chemistry	<hr/> \$7,205 51
<i>Demonstrators and Associates :</i>	
G. Boyd, Clinical Medicine	\$253 20
G. Chambers, Clinical Medicine	253 20
F. Fenton, Clinical Medicine	152 00
H. C. Parsons, Clinical Medicine	152 00
W. Goldie, Clinical Medicine	152 00
W. McKeown, Clinical Surgery	253 20
C. A. Temple, Clinical Surgery	253 20
A. H. Garratt, Clinical Surgery	152 00
O. B. Shuttleworth, Clinical Surgery	152 00
T. B. Richardson, Clinical Surgery	152 00
J. F. Uren, Clinical Surgery	253 20
K. C. McIlwraith, Obstetrics	152 00
F. Fenton, Obstetrics	253 20
C. Trow, Ophthalmology	460 00
C. B. Shuttleworth, Anatomy	150 00
W. J. McCollum, Anatomy	150 00
W. J. O. Malloch, Anatomy	150 00

G. E. Elliott, Anatomy	150 00
E. R. Hooper, Anatomy	150 00
W. J. Wilson, Anatomy	150 00
A. C. Hendrick, Anatomy	130 00
O. P. Lusk, Anatomy	150 00
A. J. Mackenzie, Anatomy	150 00
D. McGillivray, Anatomy	150 00
E. S. Ryerson, Anatomy	100 00
S. H. Westman, Anatomy	100 00
T. B. Richardson, Anatomy	50 00
F. W. Marlow, Anatomy	50 00
T. D. Archibald, Pathology, etc.	250 00
G. Silverthorn, Pathology, etc.	150 00
O. J. Wagner, Pathology, etc.	150 00
M. M. Crawford, Pathology, etc.	150 00
H. C. Parsons, Pathology, etc.	150 00
W. H. Pepler, Pathology, etc.	150 00
F. A. Clarkson, Pathology, etc.	100 00
H. S. Hutchison, Clinical Laboratory	250 00
W. N. Meldrum, Clinical Laboratory	100 00
E. S. Ryerson, Assistant	50 00
R. H. Mullin, Assistant	50 00

General Service :

A. Primrose, Secretary to Faculty	\$1,200 00
J. J. Mackenzie, Assistant Secretary	100 00
Thos. Motton, caretaker	720 00
J. S. Pollock, chief engineer (7 mos.)	420 00
John Taylor, assistant engineer (7 mos.)	355 00
Alex. Wilson, janitor (9 mos.)	453 50
George Lynne, attendant, Anat. dept.	660 00
J. Anderson, attendant, (9½ mos.)	380 00
H. Crombie, boy messenger, etc.	143 00
Miss M. Armour, stenographer	422 00

\$6,486 40

Miscellaneous :

Dr. N. H. Beemer, Psychology fees	\$540 00
Dr. J. H. Richardson, Honorarium as retired Professor	250 00
Dr. Uziel Ogden, Honorarium as retired Professor	250 00

\$4,853 50

\$1,040 00

Maintenance :

\$37,142 38

(a) Anatomical Department :

J. H. Millard, Subjects	\$75 00
D. J. Harris, Subjects	240 00
A. H. Dodsworth, Subjects	125 00
E. Goodwin, Subjects	40 00
J. G. Frost, Subjects	100 00
Joseph Rogers, Subjects	60 00
J. W. Crawford, Subjects	40 00
G. L. Phillips, Subjects	40 00
A. Klippert, Subjects	80 00
C. Ranney, Subjects	60 00
E. White, Subjects	80 00
N. Tait, Subjects	60 00
J. B. McIntyre, Subjects	80 00
J. Wood, Subjects	40 00
A. Jahnke, Subjects	40 00
J. Brophy, Subjects	20 00
A. H. Swarts, Subjects	25 00
D. Belleghem, Subjects	20 00
T. Coleman, Subjects	15 00
J. S. Hogg, Subjects	20 00
H. F. MacKendrick, Subjects	20 00
J. T. Bain, Subjects	20 00
A. Millard, fees as Inspector of Anatomy, expenses re Subjects, and burial of remains	1,112 40
Dr. Primrose, expressage re Subjects	559 10
Inland Revenue Dept., methylated spirit	267 92
W. Lloyd Wood, chemicals	152 25
John Otto and Son, cotton and oilcloth	52 18
Sisters S. John the Divine, aprons, etc.	60 00
Mrs. Clark, washing towels	22 40
Grant-Hamilton Oil Coy., soap and oil	17 95
Michie and Coy., soap, etc.	29 30
Chandler and Massey, laboratory supplies	90
Steinberger Hendry Coy., crayons	3 90
John T. Wilson, case, trays, etc.	43 23
W. J. McGuire and Coy., plumbing	94 55
Wm. Cane, platform, railing, etc.	97 40
A. Pride, backing diagrams	50 00
Bell Telephone Coy., telephone service	47 00
University of Toronto, annual payment for occupation of part of Biological Building	1,900 00

\$5,810 48

(b) Departments other than Anatomy :

J. A. Carveth and Coy., microscopes, slides, etc.	\$1,204 22
Carl Zeiss, apparatus	26 94
R. Jung, apparatus	11 55
Whitall Tatum and Coy., jars, etc.	19 00
Grubler and Coy., chemicals	14 70
Sohering and Glatz, chemicals	9 19
Eimer and Amend, chemicals	3 79
Chemists' and Surgeons' Supply Coy., chemicals	13 65
Baker and Adamson Coy., chemicals	9 24
Elliott and Coy., chemicals	2 24
Evans and Sons, chemicals	60 91
W. Lloyd Wood, chemicals	88 85
Lyman Bros. Coy., chemicals	10 65
Queen City Oil Coy., wax	1 25
Tor. Liquid Carbonate Coy., gas	2 00
Ontario Rubber Coy., tubing	10 20
Beaver Flint Glass Coy., test tubes	3 00
J. F. Hartz Coy., test tubes and surgeons' appliances	29 90
Chandler and Massey, laboratory supplies	157 72
Map and School Supply Coy., laboratory supplies	5 37
Griffiths Dixon Coy., slides and glasses	25 23
J. J. Milliken, slides	6 00
Steinberger Hendry Coy., crayons	1 40
Fletcher Mfg. Coy., repairing incubator	10 00
Booth Copper Coy., still	33 00
V. A. Russell, dishes	13 50
J. G. Ramsey and Coy., photo materials	2 20
Art Metropole, drawing materials	3 00
Miss Jackson, diagrams	20 80
Lake Simcoe Ice Coy., ice	44 75
Inland Revenue Dept., methylated spirit	139 25
Dr. G. A. Peters, towels, etc.	2 50
G. Harcourt and Son, gowns	24 00
L. Rawlinson, screens	27 50
G. N. Reynolds and Coy., chair discs	5 00
W. J. McGuire and Coy., sink	69 80
Robinson and Heath, freight	6 15
C. W. Irwin, freight	4 47
J. Perry, moving apparatus, etc.	16 00
W. Goddard, moving apparatus, etc.	5 00
M. Rawlinson, cartage	75
T. Motton, food for animals, washing towels and sundries	292 72
Bell Telephone Coy., telephone service	72 79
Tor. School of Medicine, rent	800 00
University of Toronto, repayment of balance of old advance	\$800 00
Interest	32 00
	832 00
University of Toronto, interest on New Building account	3,000 00
Interest and instalment on Equipment account	2,215 27

\$9,357 40

(c) Maintenance New Building :

Elias Rogers Coy., fuel	\$3,153 89
Conger Coal Coy., fuel	16 50
City Treasurer, water	395 53
Consumers' Gas Coy., gas	96 46
Tor. Elec. Light Coy., electric current	255 19
Fortnightly Pay Lists, wages of cleaners	1,420 77
W. Belingham, roller grates	125 00
Poole and Coy., repairing engine	42 30
Poison Iron Works, repairing engine and boilers	64 62
W. K. Simpson, line, shaft, etc.	32 25
Can. Foundry Coy., valves	3 75
W. J. Mason, galv. feeders	6 72
Galloway, Taylor and Coy., castings	3 05
Dodge Mfg. Coy., pulleys	9 94
F. J. Moore, benches	156 00
A. B. Ormsby, cornice	21 00
Consol. Plate Glass Coy., glass	16 07
Tor. Plate Glass Coy., glass	9 77
Scholey Bros., lumber	181 57
R. Dirnis and Son, lumber	118 27
Firstbrook Box Coy., sawdust	4 00
Rice Lewis and Son, hardware	246 74
Aikenhead Hardware	186 54
Fletcher Mfg. Coy., pails and brushes	20 30
J. T. Wilson, brooms, etc.	5 30
United Factories, brooms, etc.	12 83
R. Simpson Coy., sweeper	6 75
T. Eaton Coy., towels	63 75
W. A. Murray Coy., towels and dusters	20 00
Ontario Rubber Coy., hose	21 50
McColl Brock Coy., turpentine, etc.	103 06
Grant-Hamilton Oil Coy., turpentine and soap	42 45
W. C. McFarland, paint and turpentine	47 55
D. Bell, cleaning materials, etc.	27 95
Michie and Coy., cleaning materials, etc.	4 36

G. and J. Murray, oil and lights	21 50
E. H. Roberts, keys	11 60
Peterboro' Lock Coy., key blanks	6 00
E. H. Stewart, barrels, etc.	4 00
Wm. Junor, tumblers, etc.	2 15
T. L. Hicks, electric bells, etc.	16 25
O. Ballard, repairing wiring	13 60
Can. Gen. Elec. Coy., electric supplies	26 20

\$7,043 04

(d) General Expenses :

Canada Lancet, advertising	\$125 00
Can. Practitioner and Review, advertising	125 00
Westminster Coy., advertising	120 00
Presbyterian S. S. publications, advertising	108 33
Educ. Publishing Coy., advertising	100 00
Alumni Association, advertising	99 99
Can. Journal Med. and Surg., advertising	80 00
Montreal Med. Journal, advertising	75 00
Educational Monthly, advertising	60 00
Acta Victoriana, advertising	42 00
Torontonensis, advertising	25 00
Trinity Year Book, advertising	25 00
Acta Rideiana, advertising	15 00
Ont. Educ. Association, advertising	15 00
Dom. Med. Monthly, advertising	10 00
Albert College Publication, advertising	10 00
Trin. Coll. School Record, advertising	9 00
U. C. College Times, advertising	8 00
University Press, printing calendar, etc.	575 11
Brown Bros., stationery, etc.	96 08
Wm. Briggs, printing	1 40
Macmillan and Coy., reprints	49 15
Alumni Association, reprints	18 41
Prof. C. H. Sherrington, expenses re inaugural address at opening	300 00
Alex. Downey, reporting proceedings	39 40
Rolph, Smith and Coy., invitations, etc.	14 00
Bain Book Coy., invitations, etc.	4 00
Donald Bain and Coy., invitations, etc.	37 50
Barber and Ellis Coy., envelopes	3 50
Dr. Primrose, disbursements re opening	102 68
J. Laballister, labor re opening	13 50
O. E. Bradshaw, attendance	2 00
G. Hare, attendance	2 00
T. Hare, attendance	2 00
Dr. Primrose, to pay deficit annual banquet	568 17
Dr. Primrose, general disbursements, postage, etc., for session	547 53
Hutchison and Coy., medals	48 30
Ryrie Bros., engraving medals	10 00
Office Specialty Coy., filing cabinets and supplies for Secretary's office	92 88
Grand and Toy, wire baskets, etc.	19 15
C. G. Young Coy., rubber stamps	3 50
G. Gipton, rubber stamps	1 75
Parsons-Irons Coy., marker	3 00
United Typewriter Coy., repairs and papers	11 75
N. R. Butcher, stenographer supplied	80 00
Polk Directory, medical directory	6 00
Carswell Coy., statutes	2 00
University Library, medical books	300 00
University of Toronto, share of insurance	441 00
H. L. Hime and Coy., valuation	15 00
W. P. Kaufmann, chemical instruction to Trinity students	50 00
Dr. R. A. Reeve, expenses as Dean of the Faculty	430 62

\$4,943 70

\$27,154 59

APPENDIX VI.

UNIVERSITY OF TORONTO AND UNIVERSITY COLLEGE.

ANALYSIS OF EXPENDITURE FOR THE YEAR ENDING 30TH JUNE, 1904.

University.

Cost of Administration relative only to University	\$111,652 20
Less 1. University Fees	\$39,946 25
2. Cost of three departments maintained by the Government	42,433 18
3. City grant for one Chair	3,000 00
	85,379 43
Portion to be derived from General Income	\$26,272 77

University College.

Cost of Administration relative only to University College	37,683 67
Less 1. College fees	17,180 00
2. City grant for one Chair	3,000 00
	20,180 00
Portion to be derived from General Income	17,503 67

General Income.

1. From Endowment	56,039 88		
2. Regular grant from Government	7,000 00		
3. Wild Lands sales applicable as Revenue	1,347 86		
4. General fees, (Gymnasium and Library).....	2,724 15		
5. Deficit to be paid by Government	30,207 54		
	<u>97,319 43</u>		
Less interest on trust funds reserved	9,784 27		
		87,535 16	
Cost of general administration		<u>43,758 72</u>	
Balance of General Income.....			\$43,776 44
Proportion of General Income needed for :			
University	\$26,272 77	- 60.01 per cent.	
College	17,503 67	- 39.99 per cent.	
	<u>\$43,776 44</u>		

THIRTIETH ANNUAL REPORT

OF THE

Ontario Agricultural College

AND

Experimental Farm

1904

(PUBLISHED BY THE ONTARIO DEPARTMENT OF AGRICULTURE, TORONTO.)

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO :
Printed by L. K. CAMERON, Printer to the King's Most Excellent Majesty
1904.



TORONTO:

WARWICK BRO'S & RUTTER, LIMITED, PRINTERS.

To the Honourable WILLIAM MORTIMER CLARK, K.C.,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR :

I have the pleasure to présent herewith for the consideration of your Honour the Report of the Ontario Agricultural College for 1904.

Respectfully submitted,

NELSON MONTEITH,

Minister of Agriculture.

TORONTO, 1905.

The Ontario Agricultural College

AND

Experimental Farm, Guelph, Ont.

HON. NELSON MONTEITH, Minister of Agriculture, Toronto, Ont.

STAFF OF PROFESSORS, LECTURERS AND DEMONSTRATORS. 1905.

G. C. CREELMAN, B.S.A., M.S.	President
H. H. DEAN, B.S.A.	Professor of Dairy Husbandry
C. A. ZAVITZ, B.S.A.	Professor of Field Husbandry and Experimentalist
J. HUGO REED, V.S.	Professor of Veterinary Science
G. E. DAY, B.S.A.	Professor of Animal Husbandry and Farm Superintendent
H. L. HUTT, B.S.A.	Professor of Horticulture
J. B. REYNOLDS, B.A.	Professor of Physics and Lecturer in English
F. C. HARRISON, B.S.A., D.P.H.	Professor of Bacteriology
W. LOCHHEAD, B.A., M.S.	Professor of Biology and Geology
R. HARCOURT, B.S.A.	Professor of Chemistry
W. R. GRAHAM, B.S.A.	Manager and Lecturer in Poultry Department
H. R. ROWSOME	Lecturer in Apiculture
W. P. GAMBLE, B.S.A.	Lecturer in Chemistry
H. S. ARKELL, B.S.A.	Lecturer in Agriculture
F. H. REED	Dean of Residence and Instructor in English and Mathematics
ALICE ROWSOME, B.A.	Assistant in Library and Instructor in French and German
T. D. JARVIS, B.S.A.	Lecturer in Biology
V. W. JACKSON, B.A.	Demonstrator in Biology
E. G. DE CORIOLIS, B.S.A.	Demonstrator in Chemistry
W. H. DAY, B.A.	Demonstrator in Physics
H. S. PEART, B.S.A.	Demonstrator in Horticulture
B. BARLOW, B.S.	Demonstrator in Bacteriology
J. BUCHANAN, B.S.A.	Demonstrator in Field Husbandry
CAPTAIN CLARK	Instructor in Drill and Gymnastics

Office Staff.

S. SPRINGER	Bursar
B. S. PICKETT, B.S.A.	Secretary
MISS ANNIE HALLETT	Stenographer

Physician.

W. O. STEWART, M.D.

Staff of Instructors, Macdonald Institute.

S. B. MCCREADY, B.A.	Professor of Nature Study
MISS M. U. WATSON	Lady Principal
JOHN EVANS	Macdonald Instructor in Manual Training
MISS HELEN GIVEN	Instructor in Domestic Science
MISS HELEN HOLLAND	Assistant in Domestic Science
MISS GRACE ROBERTS	Instructor in Domestic Art
ANNIE ROSS, M.D.	Instructor in Physiology, Home Nursing, and Emergencies



JAMES MILLS, L.L.D.
Ex-President of the Ontario Agricultural College.

ONTARIO AGRICULTURAL COLLEGE

AND

EXPERIMENTAL FARM.

FOR THE YEAR 1904.

GUELPH, December 31st, 1904.

To the Honorable the Minister of Agriculture :

SIR,—I have the honor to transmit herewith the Thirtieth Annual Report of the Ontario Agricultural College and Experimental Farm, including the Report of the Macdonald Institute.

The following is a brief review of the work contained in this Report :

THE ONTARIO AGRICULTURAL COLLEGE.

PAGE.

PART I.—REPORT OF THE PRESIDENT	3
Changes in the Staff, 3; The late Dr. Muldrew, 4; Attendance, 4; Macdonald Hall, 4; Consolidated Rural School, 4; College Work and Progress, 5; The Matron, 5; Short Courses, 6; Farmers' Institutes' Excursions to College, 6; Needs of the College, 6; Students of the College, 7; Analysis of College Roll, 7; Bachelors of the Science of Agriculture, 8; Recipients of Associate Diplomas, 8; First Class Men, 9; Scholarships, 10; Prizes, 10; Professional Dairy School Certificates, 10; Financial Statement, 1904, 12.	
PART II.—REPORT OF THE DEAN OF RESIDENCE	17
PART III.—REPORT OF THE PROFESSOR OF PHYSICS AND LECTURER IN ENGLISH	19
Instruction in English, 19; Instruction in Physics, 20; Additional Lecture Courses, 22; Correspondence, Articles and Bulletins, 22; Outside Work, 22; Lightning Report, 23; The Shipping of Fruit to Winnipeg by Freight, 25; Some Notes on Dimensions of Packages in Relation to Cooling, 29; Observations at American Colleges, 30; Weather Report, 1904, 32; Investigations, 33.	
PART IV.—REPORT OF THE PROFESSOR OF BIOLOGY AND GEOLOGY	35
Instruction, 35; Outside Work, 37; Report of Mr. T. D. Jarvis, Lecturer in Biology, 38; Weed Spraying, 39; Insects and Fungus Diseases, 40; A Key to Fungus Diseases of the Apple, 43; A Key to Fungus Diseases of the Peach, 43; A Key to Fungus Diseases of Brambles, 44; A Key to the Fungus of the Groselles, 45; A Key to the Fungus Diseases of the Grape, 45; Apple Tree Cankers, 48; Sun Scald and Frost Canker, 48; Nectria Canker, 48; Bitter Rot Canker, 49; Black Rot Canker, 49.	
PART V.—REPORT OF THE PROFESSOR OF CHEMISTRY	50
Teaching, 50; Miscellaneous Work, 51; Investigation Work: Tests of different varieties of Sugar Beets, 51; The Sugar Beet Industry, 54; Wheat and Flour, 54; Report of the Columbus Laboratories, 57; Preston, Stanley, and Percy Wheats, 58; Quality of Flour from Wheat grown in Manitoba and North-West Territories in 1904, 59; Acidity of Flour, 60; Swamp Soils, 60; Abitibi Soils, 62; Insecticides and Fungicides: Lime-Sulphur Washes, 63; Fungicoid, 64; Preservatives in Butter, 64.	
PART VI.—REPORT OF THE LECTURER IN CHEMISTRY	66
Teaching, 66; Condition of our Export Trade with Great Britain, 67.	
PART VII.—REPORT OF THE PROFESSOR OF VETERINARY SCIENCE	70
Class Room, 70; Short Course in Stock Judging; Diseases of Stock, 71.	

PART VIII.—REPORT OF THE PROFESSOR OF DAIRY HUSBANDRY.....	73
Improvements, 73; The Dairy School, 74; Experiments in Cheesemaking, 74; Rennet <i>vs.</i> Pepsin, 75; Moisture in Curd and Cheese, 76; Extra Rennet for Cheese Ripened in Cold Storage, 77; Placing Cheese on Shelves <i>vs.</i> Boxing, 78; Ripening Cheese in the Press, 78; Effect of five different temperatures on Cheese ripening, 79; Ripening Cheese in Ice and Mechanical Cold Storage, 80; Experiments in Butter-making, 81; Pasteurizing Milk <i>vs.</i> Pasteurizing Cream, 82; Sweet Cream with Culture <i>vs.</i> Ripened Cream, 82; Churning Sweet Cream <i>vs.</i> Sweet Cream with Culture, 83; Dry <i>vs.</i> Moist Parchment for Butter, 84; Cold Storage for Butter, 84; Blatchford's Sugar and Flaxseed for Cows and Calves, 85; Improved Molasses Cattle Food for Milch Cows, 85; Dairy Herd, 86; Comments on Herd Records, 87.	
PART IX.—REPORT OF THE PROFESSOR OF ANIMAL HUSBANDRY AND FARM SUPERINTENDENT.....	89
Visit to Great Britain, 89; Investigations Regarding Canadian Bacon on the British Market and the Production of Bacon in Denmark, 89; Farm Superintendence, 92; Notes on Feeding Stock, 94; Live Stock Experiments, 96; Outside Work, 96.	
PART X.—REPORT OF LECTURER IN ANIMAL HUSBANDRY	97
Experiments with Swine: Blood Meal and Tankage as compared with Skim milk for Hogs, 97; Pigs on Pasture, 99; Soy Beans <i>vs.</i> Rape as Green Feed for Pigs, 100; Experiments in Steer feeding, 101.	
PART XI.—REPORT OF THE PROFESSOR OF HORTICULTURE.....	102
Teaching, 102; Meetings Attended, 104; Reports and Articles Published, 104; Co-operative Testing of Small Fruits, 105; Trial Shipment of Fruit to Winnipeg, 105; Orchard Cover Crops, 106; Orchard Fruits, 109; The Bush Fruits, 110; Tomatoes, 112; The Vegetable Garden, 112; Ornamental Shrubs, 114.	
PART XII.—REPORT OF THE PROFESSOR OF BACTERIOLOGY	117
Lectures, 117; Laboratory Work, 118; Meetings Attended, 118; Publications, 118; Routine Laboratory Work and Analyses, 118; Assistance, 119; Research Work, 119; Experimental Work, 123; Papers, etc., published, 123.	
PART XIII.—REPORT OF THE PROFESSOR OF FIELD HUSBANDRY AND EXPERIMENTALIST	129
Outline of Work in Field Husbandry for 1904, 130; Experimental Work at the Agricultural College, 131; Results of Experiments, 133.	
PART XIV.—REPORT OF THE MANAGER OF THE POULTRY DEPARTMENT.....	135
Hatching Eggs in January, 136; Later Hatching, 136; New Houses, 137; An Experiment to Force Fowls to Moults, 138; Cold Houses, 138; General treatment of Breeding Stock, 139; New Breeds of Fowls added during the year, 139; Geese, 139; Experiments in Fattening Chickens, 140; Testing Individuality, 141.	
PART XV.—REPORT OF THE LECTURER ON APICULTURE	142
PART XVI.—REPORT OF THE LIBRARIAN.....	143
PART XVII.—REPORT OF THE PHYSICIAN	145

THE MACDONALD INSTITUTE.

PART I.—REPORT OF THE DEPARTMENT OF HOME ECONOMICS	147
Equipment, 147; Courses of Study, 147; Summary of Attendance, 150.	
PART II.—REPORT OF THE DIRECTOR OF MANUAL TRAINING	152
The Agricultural Students, 152; Optional Course in Wood Carving, 154; The Consolidated School, 154; Nature Study Correlated Course, 154; Normal Course, 155.	
PART III.—REPORT OF THE ACTING DIRECTOR OF NATURE STUDY	158
The Death of Dr. Muldrew, 158; The Courses in Nature Study, 160; Teachers' Normal Course of One Year, 161; Courses of Study and Practice, 161; Outlines of Nature Studies, 162; List of Nature Study Students, 164; Equipment for Nature Study, 165; The Relation of the Manual Training Department to Nature Study, 165; The Relation of the Macdonald Institute to the Rural Schools, 166; What is Nature Study?, 168; The Advantages of Nature Study, 170; The Agricultural Phase of Nature Study, 170; The Training of Teachers of Nature Study, 172.	

I have the honor to be,

Your obedient servant,

G. C. CREELMAN, *President.*

ONTARIO AGRICULTURAL COLLEGE.

PART I.

REPORT OF THE PRESIDENT.

On the 1st of February, 1904, Dr. James Mills, President of the Ontario Agricultural College, accepted a position on the Railway Commission of the Dominion of Canada. I was then appointed President of this Institution, and assumed duties at once. Having graduated from the College in the first University Class in Agriculture in 1888, and having visited it every year with one exception since that time, I was more or less familiar with the work that was being carried on. During the year I have endeavored to familiarize myself with the duties of the position and its responsibilities.

THE STAFF.

I have received at the hands of the Professors of this Institution nothing but the utmost kindness. They have assisted me in every way since my coming among them, and I desire to bear witness at this time, not only to the hearty support which they are giving the President, but also to the zeal and enthusiasm which they are showing in their work.

CHANGES IN THE STAFF.

Ever since the College was organized, the Professor of Agriculture has had complete charge of the farm, as well as the instruction work in live stock and field husbandry. The science of agriculture has made great advances in the last few years, and as a result, specialists have had to be called in to take charge of certain branches of the work. It has been thought best, therefore, to divide the former department of Agriculture, giving to Prof. C. A. Zavitz, our Experimentalist, a new branch of the work, to be known as the department of Field Husbandry. The subject of tillage, so far as it can be taught in the class-room and laboratory, has been transferred from the department of Agriculture to the department of Physics, under the direction of Prof. J. B. Reynolds, while Prof. G. E. Day retains all of the live stock work and the superintendence of the farm, and his branch of the work shall hereafter be designated as the department of Animal Husbandry.

As a result of this re-arrangement, Mr. W. H. Day, Demonstrator in Physics, has been promoted to a lectureship in that department; and in the department of Biology, Mr. T. D. Jarvis, was appointed Lecturer, in place of Mr. J. W. Hotson, who resigned in June to take the principalship of the new Consolidated Rural School.

Mr. M. Cumming, Lecturer in Animal Husbandry, has been appointed Principal of the College of Agriculture at Truro, Nova Scotia. Mr. Cumming leaves us on the 1st of February next, and I take occasion at this time to bear testimony to the efficient work of Mr. Cumming as Assistant and Lecturer at this College in connection with our live stock work.

THE LATE DR. MULDREW.

On the afternoon of October the 7th, the entire College community was shocked by the news of the sudden death of Dr. W. H. Muldrew, Dean of Macdonald Institute. Dr. Muldrew was thirty-seven years of age, and had just commenced upon his life work,—the training of teachers and others in the science of Nature-Study. I have asked Professor Lochhead who was so closely associated with Dr. Muldrew in his work, to outline in detail the scope of the work which Dr. Muldrew had planned, and to tell something of his hopes and aspirations. The information will be found in the report of the department of Nature-Study.

ATTENDANCE.

As will be seen in the summary on another page, the attendance at the College during the year 1904 was the best in its history, 833 students having attended lectures during the year. The great majority were registered from Ontario, but every other Province in the Dominion was represented as well. England contributed sixteen; the Argentine Republic, sixteen; while Australia, Austria, Grenada, India, Jamaica, Scotland, Spain, United States, Uruguay, Newfoundland, and Switzerland, each sent one or more. The average age of students in attendance was twenty years.

CHANGES IN THE COLLEGE REPORT.

For the first time, the College Report will contain an account of the work done in connection with Macdonald Institute. The three departments of Household Science, Manual Training, and Nature Study are now in full operation, and the attendance is much larger during this year than we anticipated. The total number of students in all classes at the Macdonald Institute during the year was 256. The reports of the heads of the different departments will be found at the back part of this report.

MACDONALD HALL.

During the year the ladies' residence, known as Macdonald Hall, has been completed. With due regard to economy, the building has been furnished throughout in such a manner as to be pronounced convenient and comfortable by all the residents. The building accommodates 107 girls, and on the day of the Macdonald Opening, September the 20th, 1904, every room was taken.

Mrs. Fuller, Lady-Superintendent, by rare skill and tact, combined with wonderful energy and patience, has rendered most efficient service in opening the Hall and administering discipline during the first term.

Miss Kennedy, as Housekeeper, has also been faithful in her duties at all times.

The Government has undertaken to support Macdonald Institute and Macdonald Hall, and we are asking at this time for a grant sufficient to meet all necessary expenses.

CONSOLIDATED RURAL SCHOOL.

The piece of land lying between Macdonald Institute and the Brock Road was purchased some time ago by Professor Robertson for the purpose of erecting a consolidated school and for the laying out of play grounds and school gardens. During the year a splendid three-story building was constructed, and six teachers were engaged for the instruction of the children of the several adjacent school sections which had decided to unite and send

the children to a central school. As the land comprising the school grounds joins our College campus, we have, at the request of the trustees, assumed the responsibility of caring for the same; so that the school may be said to be situated on our College campus.

Mr. J. W. Hotson, formerly Lecturer in Biology at this College, is Principal of the new Consolidated School, and seems to be giving, in every particular, entire satisfaction.

COLLEGE WORK AND PROGRESS.

The work in the various departments of the College has gone on pretty much as usual. During the past year the class-room and laboratory work has been heavier than formerly, on account of the increased attendance of students.

The bulletins prepared by members of the College Staff and published by the Department of Agriculture during the past year are as follows:—

No. 134—"Hints in Making Nature Collections in Public and High Schools," by W. H. Muldrew.

No. 135—"The Cream-Gathering Creamery," by H. H. Dean and J. A. McFeeters.

No. 136—"Some Bacterial Diseases of Plants Prevalent in Ontario," by F. C. Harrison and B. Barlow.

No. 137—"A Bacterial Disease of Cauliflower and Allied Plants," by F. C. Harrison.

Through a liberal grant by the Government, we have been enabled to make several much needed improvements in the boys' dormitory. In this building, we have 181 students, two in each room, each accommodated with a single iron bed.

Through cramped accommodation in the kitchen, pantry, and store-room, the Matron found it hard to properly cater to the large number of students in attendance. During the year we have reconstructed the kitchen and pantries, have added a bake-room, and employed a competent baker, who makes all the bread used both at the College and Macdonald Hall, and in addition carves all the meat each day supplied to the College boys' dining-room. The carving of meats in the kitchen, rather than by the boys themselves in the dining-room, has effected a saving of many dollars each month, more than enough to pay the entire wages of the cooks and the carver and baker.

The lavatories have also been renovated, a wash-room has been added, and new bathrooms, with all modern fixtures, have been supplied.

THE MATRON.

On October the 1st, Mrs. Craig, who has been Matron at this College for fifteen years, resigned to make a home for her son in the city of Ottawa. I wish now to bear testimony to the long and faithful services of Mrs. Craig as Matron of this Institution. In case of sickness among the College boys, she was most attentive and sympathetic, and many a boy, when feeling badly and far from home, has had cause to bless the kindly, motherly attentions of Mrs. Craig.

Miss Hardy, of Orillia, has been appointed Matron at this Institution.

SHORT COURSES.

So many of our farmers, who are in complete sympathy with the work we are doing here, find it impossible to leave home for many consecutive weeks. It was with the view of accommodating such persons that short courses in dairying, live stock judging, grain judging, and poultry raising,

were started at this College some three years ago. That these courses are being appreciated is evidenced by the fact of the continued large attendance. Last year there were 92 students in the Dairy Course, 132 in Stock and Seed Judging, and 23 in the Special Course in Poultry. Specialists in their several departments were brought to the College from other Provinces and some of the States of the Union to assist our own professors in the instruction work in the Short Courses.

FARMERS' INSTITUTE EXCURSIONS TO COLLEGE.

It is really wonderful the way in which the farmers continue to visit this Institution, each year in the month of June. During 1904 the attendance was quite as large as usual, and it is estimated that between 35,000 and 40,000 persons visited the College during that month. They arrive usually about eleven o'clock, are conducted at once to the gymnasium, where lunch is provided, during the progress of which the President takes occasion to point out what is being done in the different departments of the College that is of interest to the practical farmer. After lunch, visitors are conducted over the farm, through the experimental plots, through the dairy, and through the poultry buildings. The ladies particularly are given an opportunity of seeing the workings of Macdonald Institute, and next year we will have a new feature, in the Rural Consolidated School, to show our farmer friends.

NEEDS OF THE COLLEGE.

Under this heading, in the last report of the College, Dr. Mills made the following statement:—

"The most urgent needs of the College at the present time are increased dormitory accommodation; an Insectary for practical work in Entomology; a large building furnished with shafting, electric power, etc., for operating, comparing, and studying implements of different kinds during the winter months, when students have but little opportunity for practical work in the ordinary outside departments; and, last but not least, a new Bacteriological Laboratory, with a good isolation stable, for instruction and research in the boundless field which opens up before the investigator in this very important branch of scientific work,—closely connected, as it is, with soil fertility, dairying, stock raising, and every form of disease which afflicts man or beast. What a blessing it would be if the bacteriologists should succeed in finding, say, for hog cholera or for typhoid fever, such an anti-toxin as they not long ago found for diphtheria. And, in conclusion, it may not be amiss to call attention to the fact that the State of Michigan, U.S.A., has recently provided for its Agricultural College, Lansing, a Bacteriological Laboratory at a cost of \$55,000, raised by direct taxation on the property of the State,—\$30,000 for the building and \$25,000 for equipment."

None of these needs asked for were provided; hence I ask for them again and in addition pray that money may be voted for the following absolutely necessary additions:—

(2) An addition to the Chemical Laboratory, rendered absolutely necessary by the increased attendance in our College classes, especially from Macdonald Institute.

(2) A new laundry building, with machinery and equipment to accommodate the needs of the students in Macdonald Hall and the College residence.

G. C. CREELMAN,
President.

STUDENTS OF THE YEAR.

ATTENDANCE.

The total number of students registered for work at the College in 1904 was 833, as follows:—

General Course	309
Specials in General Course Work	21
Dairy Courses	92
Short Course in Stock and Seed Judging	132
Short Course in Poultry Raising	28
	<hr/> 577

At Macdonald Institute:

Domestic Science	148
Nature Study	77
Manual Training	31
	<hr/> 256

Total in all Courses 833

ANALYSIS OF COLLEGE ROLL (GENERAL COURSE), 1904.

1. From Ontario.

Algoma	1	Kent	1	Prescott	2
Brant	12	Lambton	3	Prince Edward	3
Bruce	6	Lanark	5	Russell	1
Carleton	6	Leeds	3	Simcoe	13
Dufferin	6	Lincoln	6	Stormont	2
Dundas	8	Middlesex	8	Victoria	1
Durham	4	Muskoka	4	Waterloo	2
Elgin	4	Norfolk	3	Welland	3
Essex	4	Northumberland	3	Wellington	17
Frontenac	1	Ontario	6	Wentworth	17
Glengarry	7	Oxford	5	York	13
Grey	7	Parry Sound	2	Toronto	19
Halton	4	Peel	1		
Hastings	3	Perth	4		
Huron	6	Peterborough	1	Total	227

2. From Other Provinces of the Dominion.

Assinaboia	1	New Brunswick	4	Quebec	17
British Columbia	3	Nova Scotia	8		
Manitoba	2	Prince Edward Island	2		37

3. From Other Countries.

Argentina	16	India	1	Uruguay	1
Australia	1	Jamaica	4	Newfoundland	1
Austria	1	Scotland	2	Switzerland	1
England	16	Spain	1		
Grenada	1	United States	20		66

Ages and Religious Denominations.

The limits of age of students in the general course, 1904, ranged from 16 to 41 years. The average age was 20.

The religious denominations were represented as follows:—

90 Methodists, 88 Presbyterians, 70 Episcopalians, 29 Baptists, 27 Roman Catholics, 10 Congregationalists, 5 Disciples, 3 Friends, 2 New Jerusalem, 1 Christadelphian, 1 Lutheran, 1 Mennonite, 1 Plymouth Brethren, 2 with no church.

Counties represented in 1904.

It will be noted in the analysis of the College Roll that 41 Ontario counties and districts were represented in the General Course in 1904. There were 17 each from Wellington and Wentworth; 13 each from York and Simcoe; 12 from Brant; 8 each from Dundas and Middlesex; 7 each from Glengarry and Grey; 6 each from Bruce, Carleton, Dufferin, Huron, Lincoln, and Ontario; 5 each from Lanark and Oxford; and smaller numbers from other counties.

BACHELORS OF THE SCIENCE OF AGRICULTURE.

Arkell, H. S.	Teeswater, Bruce, Ont.
Avila, C.	Cordoba, Argentine.
Barber, T. C.	Yorkton, Assa.
Bray, C. I.	Kleinburg, York, Ont.
Buchanan, D.	Florence, Lambton, Ont.
Bustamante, R. S.	Jujuy, Argentine.
Carpenter, G. H.	Fruitland, Wentworth, Ont.
Cutting, A. B.	Guelph, Wellington, Ont.
Dewar, W. R.	Fruitland, Wentworth, Ont.
Fausher, B. W.	Florence, Lambton, Ont.
Fulmer, H. L.	Ruthven, Essex, Ont.
Galbraith, S. M.	Ellesmere, York, Ont.
Hamilton, W.	Ravenshoe, York, Ont.
Johnston, J. P.	Fingal, Elgin, Ont.
MacRae, C. M.	Cumberland, Russell, Ont.
Panelo, J.	Buenos Ayres, Argentine.
Peltzer, J.	Buenos Ayres, Argentine.
Pickett, B. S.	Vittoria, Norfolk, Ont.
Readey, J. C.	Rosetta, Lanark, Ont.
*Rivett, T. B.	Spanish Town, Jamaica.
Thom, C. C.	Elma, Dundas, Ont.

*To pass Supplemental Examination in English.

RECIPIENTS OF ASSOCIATE DIPLOMAS.

Bailey, C. F.	Coldbrook, N. S.
Baker, M. R.	Swarthmore, Penn., U. S. A.
Ballantyne, R.	Sebringville, Perth, Ont.
Bean, W.	Haysville, Waterloo, Ont.
Birley, R. B.	Paris, Brant, Ont.
Bracken, J.	Seeley's Bay, Grenville, Ont.
Breckon, W. D.	Waterdown, Wentworth, Ont.
Colwell, H. H.	Oakville, Halton, Ont.
Dickson, J. R.	Seaforth, Huron, Ont.
Elderkin, J. B.	Amherst, N. S.
Evans, W. G.	Guelph, Wellington, Ont.
Gamble, T.	Mosgrove, Carleton, Ont.
Halliday, C.	Pakenham, Lanark, Ont.
Hart, F. C.	Wallace Bay, N. S.
Hawtin, A.	Newmarket, York, Ont.
Jones, D. H.	Bedford Park, York, Ont.
Kitchen, A. F.	St. George, Brant, Ont.
Klinck, C. R.	Victoria Square, York, Ont.
Leavens, H.	Chisholm, Prince Edward, Ont.
Lund, T. H.	Compton, Quebec.
McBeth, D.	Ormsby, Hastings, Ont.
McKenny, A.	Corinth, Elgin, Ont.
McKenzie, J.	Queen Hill, Bruce, Ont.
McMillan, H. R.	Aurora, York, Ont.
Macdonald, C. M.	Halifax, N. S.
MacVannel, A. P.	St. Marys, Perth, Ont.
Manchester, P.	Apohaqui, N. B.
Marino, A. E.	Buenos Ayres, Argentine.
Marshall, C. A.	Westbrook, Frontenac, Ont.
Metcalf, H. M.	Grimsby, Lincoln, Ont.

RECIPIENTS OF ASSOCIATE DIPLOMAS.—*Continued.*

Middleton, M. S.	Vernon, B. C.
Monroe, J. F.	South End, Welland, Ont.
Murray Wilson, J. G.	Monte Video, Uruguay.
Nixon, C. C.	St. George, Brant, Ont.
Northcott, S. A.	Solina, Durham, Ont.
Ramsay, B. L.	Toronto, Ont.
Robertson, A.	Brantford, Brant, Ont.
Scott, H. W.	Lancaster, Glengarry, Ont.
Sloan, R. B.	Blyth, Huron, Ont.
Smith, H. B.	Wanstead, Lambton, Ont.
Stayner, H. S.	Toronto, Ont.
Taylor, H. E.	Colchester, Essex, Ont.
Tucker, H. S.	Chapman, Hastings, Ont.
Weir, D.	Montreal, Que.
White, G. G.	Perth, Lanark, Ont.
Zubiaur, A.	Buenos Aires, Argentine.

FIRST CLASS MEN.

The work of the College is divided into departments, and all candidates who obtain an aggregate of seventy-five per cent. of the marks allotted to the subjects in any department are ranked as first class men in that department. The following list contains the names of those who gained a first-class rank in the different departments at the examinations in 1903, arranged alphabetically:—

First Year.

- Baker, J.* Solina, Durham, Ont., in one department; English and Mathematics.
- Bunting, T. G.*, St. Catharines, Lincoln, Ont., in two departments; English and Mathematics, and Physical Science.
- Higginson, T. D.*, Hawkesbury, Prescott, Ont., in one department; English and Mathematics.
- Kennedy, J. W.*, Apple Hill, Glengarry, Ont., in two departments; English and Mathematics, and Physical Science.
- Meek, N. W.*, Port Stanley, Elgin, Ont., in one department; English and Mathematics.
- Montgomery, C. G.*, New Richmond, Quebec, in one department; English and Mathematics.
- Sanders, G. E.*, Round Hill, Annapolis, N.S., in one department; Physical Science.
- Twigg, C. B.*, O. A. C., Guelph, Ont., in two departments; English and Mathematics, and Physical Science.
- Winslow, R. M.*, London, Middlesex, Ont., in four departments; English and Mathematics, Physical Science, Biological Science, and Agriculture.

Second Year.

- Ballantyne, R.*, Sebringville, Perth, Ont., in two departments; English and Economics, and Biological Science.
- Bracken, J.*, Seeley's Bay, Grenville, Ont., in three departments; English and Economics, Physical Science, and Biological Science.
- Dickson, J. R.*, Seaforth, Huron, Ont., in one department; English and Economics.
- Hart, F. C.*, Wallace Bay, N.S., in one department; English and Economics.

- Kennedy, A. B.*, Winchester, Dundas, Ont., in one department; English and Economics.
- Kitchen, A. F.*, St. George, Brant, Ont., in one department; English and Economics.
- Lund, T. H.*, Chorley, England, in two departments; English and Economics, and Physical Science.
- McMillan, H. R.*, Aurora, York, Ont., in one department; English and Economics.
- Smith, H. B.*, Wanstead, Lambton, Ont., in one department; English and Economics.
- Stayner, H. S.*, Toronto, Ont., in one department; English and Economics.
- Tennant, L.*, Falkland, Brant, Ont., in three departments; English and Economics, Physical Science, and Biological Science.
- Tucker, H. S.*, Chapman, Hastings, Ont., in one department; English and Economics.

SCHOLARSHIPS.

Scholarships of \$20 each in money were awarded for groups of subjects in first year work as follows:—Highest standing with a minimum of forty per cent. of the marks for each subject, and an aggregate of seventy-five per cent. of the total number of marks allotted to the subjects in the group:—

1. English, Mathematics, Book-Keeping, and Drawing—J. W. Kennedy, Apple Hill, Glengarry, Ont.
2. Physics, Chemistry, and Geology—W. G. Bunting, St. Catharines, Lincoln, Ont.
3. Agriculture, Dairying, Poultry, Apiculture, and Veterinary Science—R. M. Winslow, London, Middlesex, Ont.

PRIZES.

Prizes amounting to \$10 each, in books, were given as follows:—

1. Essay on "Macaulay as an Essayist and Writer of English Prose"—D. H. Jones, Bedford Park, York, Ont.
2. First in General Proficiency, first and second year work, theory and practice—J. Bracken, Seeley's Bay, Grenville, Ont.
3. First in General Proficiency with first class honors in major subjects, fourth year—B. S. Pickett, Vittoria, Norfolk, Ont.

Governor General's Silver Medal.

Highest in general proficiency, second year, 1903-04—J. Bracken, Seeley's Bay, Grenville, Ont.

PROFESSIONAL DAIRY SCHOOL CERTIFICATES.

The following list includes the names of those who have obtained Professional Certificates from the Dairy School since its inception. The first certificates were issued to the class of 1893.

1899.	Atwood, C. S.	.....	Arkona, Ont.	.....	Cheesemaking.
1895.	Baird, A. K.	.....	Winnipeg, Man.	.....	Buttermaking.
1902.	Ball, C.	.....	Guysboro', Ont.	.....	Cheesemaking.
1899.	Barberree, A.	.....	Corwhin, Ont.	.....	Cheesemaking.
1898.	Bell, H. J.	.....	Oxley, Ont.	.....	Buttermaking.
1896.	Biffin, J.	.....	Tavistock, Ont.	.....	Cheesemaking.
1895.	Biggin, E. O.	.....	Vernon, O., U. S. A.	.....	Cheesemaking.
1895.	Boyes, F.	.....	Nilestown, Ont.	.....	Cheesemaking.
1897.	Boyes, F.	.....	Evelyn, Ont.	.....	Cheesemaking.
1893.	Boyes, G. A.	.....	Evelyn, Ont.	.....	Cheesemaking.

PROFESSIONAL DAIRY SCHOOL CERTIFICATES.—*Continued.*

1894.	Brayley, G. B.	Marston, Ont.	Cheesemaking.
1894.	Brodie, G. B.	Gladstone, Ont.	Cheesemaking.
1894.	Calder, A. G.	Winthrop, Ont.	Cheesemaking.
1898.	Callan, P.	Innerkip, Ont.	Cheesemaking.
1895.	Code, B.	Burritt's Rapids, Ont.	Cheesemaking.
1895.	Coomber, H.	Straffordville, Ont.	Cheesemaking.
1896.	Daigle, C.	St. Louis, N. B.	Buttermaking.
1897.	Dangerfield, J. A.	Oxford Mills, Ont.	Buttermaking.
1904.	Dobbie, G. S.	Guelph, Ont.	Buttermaking.
1902.	Echegaray, S.	Santiago, Argentine	Buttermaking.
1894.	Elliott, W. J.	Thomasburg, Ont.	Buttermaking.
1897.	Flack, S.	Red Deer, N. W. T.	Buttermaking.
1898.	Fotheringham, J. W.	Courtice, Ont.	Cheesemaking.
1895.	Henricks, K.	Headford, Ont.	Buttermaking.
1895.	Hill, Geo. W.	Summerhill, Ont.	Cheesemaking.
1895.	Hill, J. A.	Conway, Ont.	Cheesemaking.
1903.	Hitchings, C. E.	Chaffee, N. Y., U. S. A.	Cheesemaking.
1903.	Holm, E.	Hespeler, Ont.	Buttermaking.
1898.	Hope, W.	Palermo, Ont.	Buttermaking.
1900.	Hutchinson, J. R.	St. George, Ont.	Buttermaking and Cheese- making.
1901.	Gibson, J. W.	Walkerton, Ont.	Cheesemaking.
1897.	Gracey, A. E.	Currie's Crossing, Ont.	Cheesemaking.
1899.	Immell, G. J.	Mildmay, Ont.	Cheesemaking.
1896.	Kinney, G.	Winthrop, Ont.	Cheesemaking.
1899.	Knight, A.	Sardis, B. C.	Buttermaking.
1900.	Lockyer, E.	New Durham, Ont.	Cheesemaking.
1898.	Marshall, E. G.	Guysboro', Ont.	Cheesemaking.
1897.	Menzies, G.	Molesworth, Ont.	Cheesemaking.
1895.	Millar, J. F.	Brantford, Ont.	Cheesemaking.
1894.	Milne, R. R.	Paisley, Ont.	Cheesemaking.
1895.	Mitchell, H.	Keewick Ridge, N. B.	Cheesemaking.
1898.	McCready, J.	Harriston, Ont.	Cheesemaking.
1899.	McDiarmid, A.	Aberfoyle, Ont.	Buttermaking.
1896.	McMillan, D.	Harrington, Ont.	Cheesemaking.
1903.	McDonald, A. C.	Navan, Ont.	Cheesemaking.
1898.	McDougall, C. W.	Guelph, Ont.	Cheesemaking.
1902.	McDougall, W.	Truro, N. S.	Cheesemaking and Butter- making.
1899.	McKay, W. A.	Underwood, Ont.	Cheesemaking.
1899.	Nesbitt, J. R.	Walkerton, Ont.	Buttermaking.
1899.	Newman, J. W.	Roeback, Ont.	Cheesemaking.
1902.	Parry, H. W.	Compton, Que.	Buttermaking.
1894.	Perry, A. D.	Wilton, Ont.	Cheesemaking.
1897.	Reynolds, H. E.	Solina, Ont.	Buttermaking.
1895.	Robertson, J.	Athens, Ont.	Cheesemaking.
1904.	Rolph, C. H.	London, Ont.	Cheesemaking.
1899.	Sandwith, H.	Sandhurst, Ont.	Cheesemaking.
1899.	Sheffield, R. D.	Gilead, Ont.	Cheesemaking.
1902.	Singleton, J. F.	Newboro', Ont.	Cheesemaking.
1895.	Singleton, W. M.	Newboro', Ont.	Cheesemaking.
1895.	Smith, F. W.	Guelph, Ont.	Buttermaking.
1895.	Smith, H.	Clarence, Ont.	Buttermaking.
1895.	Stillman, R. C.	Campbellford, Ont.	Cheesemaking.
1896.	Stocks, W. S.	Dundalk, Ont.	Cheesemaking.
1895.	Stonehouse, J.	Port Perry, Ont.	Buttermaking.
1894.	Stratton, R. W.	Straffordville, Ont.	Cheesemaking.
1901.	Thompson, W. G.	River View, Ont.	Cheesemaking.
1902.	Thompson, J. H.	Laurel, Ont.	Cheesemaking.
1896.	Tilley, J. F.	Woodstock, N. B.	Cheesemaking.
1895.	Waddell, W.	Kinloss, Ont.	Cheesemaking.
1900.	Wagg, A. J.	Mindemoya, Ont.	Buttermaking.
1896.	Wallbridge, L.	Belleville, Ont.	Buttermaking.
1898.	Wheaton, A. M.	Upper Sackville, N. B.	Cheesemaking and Butter- making.
1898.	Wiancko, T. A.	Sparrow Lake, Ont.	Buttermaking.
1900.	Witt, W. C.	Barrie, Ont.	Buttermaking.

FINANCIAL STATEMENT, 1904.

COLLEGE EXPENDITURE.

COLLEGE MAINTENANCE.

<i>Salaries and Wages:</i>	34,781 67	
<i>Meat, fish, fowl</i>	5,732 13	
<i>Food:</i>		
Bread, biscuits	1,173 42	
Groceries, butter, fruit	6,660 84	
<i>Household Expenses:</i>		
Laundry, soap, cleaning	316 52	
Women servants' wages	2,261 91	
<i>Business Department:</i>		
Advertising, printing, postage, and stationery ..	2,412 37	
<i>Miscellaneous:</i>		
Maintenance of Chemical Laboratory	735 58	
do Physical do	582 75	
do Biological do	580 24	
do Bacteriological do	479 98	
Library, reading room, books, papers, etc	2,246 12	
Scholarships	83 50	
Unenumerated	2,921 61	
Short Courses in Stock Judging	608 23	
Telephone service, rents, and messages	181 00	
School Assessment, S. S. No. 7	92 40	
Temporary assistance	770 00	
Travelling Expenses	846 55	
Student labor (per statement below)	4,001 36	
		67,468 28

MAINTENANCE AND REPAIRS OF GOVERNMENT BUILDINGS:

Furniture and furnishings	1,782 08	
Repairs and alterations	1,493 63	
Fuel	9,966 87	
Engine room supplies	603 76	
Sewage disposal	504 12	
		14,350 46

MACDONALD INSTITUTE: SALARIES AND MAINTENANCE

16,625 20

FORESTRY

2,907 90

\$101,351 84

COLLEGE REVENUE

Fees	3,844 07
Board accounts	14,977 68
Supplemental exams.	55 00
Rent of Post Office boxes (Sept. 1904, Sept. 1905.)	38 00
Sundries	34 44
Breakages	39 60
Fines. College	126 35
do Library	7 30

FINANCIAL STATEMENT.—Continued.

COLLEGE REVENUE.—Continued.

Sale of Whittaker House	440 00	
Bacteriological Laboratory Sale of solution	2 00	
Chemical Laboratory. Sale of acid, analysis of city water	60 25	
		19,584 69
MACDONALD INSTITUTE. REVENUE:		
Board	4,098 84	
Fees	2,716 65	
		\$26,400 18
Net expenditure		74,951 66

STUDENT LABOR, 1904. TO DIFFERENT DEPARTMENTS.

Totals per month		Analysis per year.	
January	243 62	College	350 46
February	334 38	Macdonald Institute	59 63
March	268 09	Grading Macdonald Grounds	63 51
April	169 93	Forestry	21 45
May and June	772 70	Engine Room	32 60
July	398 87	Chemical Laboratory	147 67
August	139 81	Bacterial do	6 23
September	321 25	Biological do	26 71
October	587 38	Physical do	66 32
November and December	765 33	Horticultural Dept.	696 97
		Mechanical do	312 59
		Farm	968 28
		Experimental do	696 19
		Poultry do	210 77
		Dairy do	345 98
	\$4,001 36		\$4,001 36

FARM EXPENDITURE.

Permanent Improvements	455 49	
Maintenance:		
Wages of foreman and men	3,968 75	
Live stock and cattle for feeding	8,465 40	
Feed	1,273 51	
Seed	209 08	
Binder twine	56 00	
Repairs, alterations, blacksmithing, etc	876 29	
Furnishings	78 04	
Tools and implements	285 70	
Advertising, printing, postage and stationery	99 45	
Fuel and light	2 38	
Experimental Feeder	407 86	
*Contingencies	389 10	
Thresher	765 75	
		16,865 31
		\$17,320 80

*Telephone service transferred to Miscellaneous in Audit Office Report, and \$36.75 paid direct not included here.

Net expenditure allowing nothing for supplies to College, feed for Dairy Stock, keep for horses for College and other Departments.

This statement includes only the cash transactions for the year.

Decrease in Revenue on account of Stock Sale in 1903.

FINANCIAL STATEMENT.—Continued.

REVENUE.

Sale of Stock:

Cattle 30 head.....	1,810 80
Pigs 204 ".....	1,742 69
Sheep 14 ".....	70 25
" Dressed carcasses. Short courses.....	518 46

Miscellaneous Sales:

Potatoes.....	160 65
Hay.....	10 00
Grain.....	142 48
Wool.....	34 56
Tank.....	2 00
Haytedder.....	5 00
Milk.....	3 56
Services of animals.....	161 50
	<hr/>
	4,651 95
Net expenditure.....	12,668 85

FIELD EXPERIMENT EXPENDITURE.

Permanent Improvements:.....	559 89
Experimentalist Salary.....	1,900 00
Foreman do.....	700 00
Teamsters do.....	644 70
Laborers do.....	2,092 00
Seed.....	470 11
Manure.....	76 74
Furnishings, repairs, blacksmithing, etc.....	301 12
Printing, postage, stationery, etc.....	120 39
Stenographer.....	317 10
Assistant Experimentalist.....	529 50
Specialist in Plant Breeding.....	700 00
Demonstrator in Field Husbandry.....	500 00
Contingencies.....	128 70
Implements.....	131 78
Typewriter.....	100 00
Horse.....	160 00
	<hr/>
	8,872 14
Total expenditure.....	\$9,432 03

DAIRY DEPARTMENT EXPENDITURE.

Permanent Improvements:.....	679 39
Wages of Engineer (8 months).....	247 50
" Cheese-maker ".....	425 02
" Buttermaker ".....	375 00
" Cattleman ".....	432 00
Temporary assistance.....	258 28
Milk.....	9,145 46
Cows.....	525 26
Feed.....	439 09
Furnishings and repairs.....	769 90
Laboratory expenses.....	52 43
Fuel and light.....	666 99
*Contingencies.....	373 89

13,710 82 \$14,290 21

*Telephone service transferred to Miscellaneous in Audit Office Report.
Allowing nothing for cream or milk supplied to College.

FINANCIAL STATEMENT.—Continued.

REVENUE.

Sale of Butter : 50,754 lbs. @ from 13c to 25c.....	9,750 34	
Cheese : 9,915½ lbs. @ from 8½c to 11c.....	997 92	
Milk : 3,179 qts. @ 4c.....	127 15	
Skim milk.....	130 80	
Cream : 63 gal @ 60c, \$37.80; 176½ qts. @ 20c, \$35.30..	73 10	
Cattle : 10 dry cows \$305.00, 2 heifers \$45.00, 2 bull calves \$50.00, 16 grade calves \$75.50..	475 50	
Hides : ..	11 50	
Sundries : ..	2 30	
		11,568 61
Net expenditure.....		2,721 60 ¹

DAIRY SCHOOL EXPENDITURE.

Wages of Instructors.....	1,714 80	
" Engineer.....	148 50	
Furnishings, repairs and appliances.....	496 85	
Fuel and light.....	644 56	
Advertising, printing, postage and stationery.....	197 28	
Contingencies.....	162 82	
Milk, for use in school.....	6,507 97	
Permanent improvements.....	300 00	
Travelling expenses.....	65 40	
Painting and cleaning.....	195 27	
Books, periodicals, etc.....	2 85	
		10,436 30

REVENUE.

Fees : ..	86 00	
Sale of Butter : ..		
17,738½ lbs. @ 16c to 24c.....	3,939 07	
Cheese : ..		
5,736 lbs. @ from 9c to 11c..	574 39	
Skim milk : ..	13 36	
Cream : ..		
113.3 gals. @ 85c, \$96.30; 6½ qts. @ 20c, \$1.25....	97 55	
Milk : ..		
1,260 qts. @ 4c.....	50 40	
Sundries : ..	10 60	
		4,771 37

Net expenditure..... 5,664 93

POULTRY DEPARTMENT EXPENDITURE.

Permanent Improvements.....		100 00
Temporary assistant.....	331 91	
Purchase of stock.....	133 99	
Feed, etc.....	262 73	
Furnishings and repairs ..	196 79	
Fuel and light.....	144 47	
Experiments in fattening..	970 20	
Incubator experiments.....	49 43	
*Contingencies.....	328 52	
		2,318 04

REVENUE.

Sale of Eggs : ..		\$2,418 04
for hatching, 73½ set.....	141.00	
for domestic use, 537 doz.....	109.18	250 18
Live Birds, 248 ..	312.50	
Dressed birds ..	344.00	
	656 50	
		906 68
Net expenditure.....		1,511 36

¹Telephone service transferred to miscellaneous in Audit Office Report.

PART II.

THE DEAN OF RESIDENCE.

To the President of the Ontario Agricultural College:

SIR,—I have pleasure in submitting herewith a report of my first year's work as Dean of Residence and Instructor in English and Bookkeeping.

As Instructor in English, my work has comprised lectures in English Grammar, English Composition, and Rhetoric, and English Literature. In Grammar I have endeavored to give to the students a working knowledge of the laws governing the use of words, their forms, inflections and combinations. In Rhetoric the course has consisted of such a study of the fundamental rules of English prose construction as would enable the students to write good English prose and to study intelligently and appreciatively the style of English prose authors. Thus the form and structure of sentences has first been dealt with, then the combining of sentences into paragraphs, and later the union of paragraphs into a connected essay. In Composition the object has been to give practice in the application of the laws of rhetoric, and training in clear thinking and correct, forcible expression. For this purpose I have had the classes write essays on such topics as: "An Incident of My Summer Vacation," "My Reading During 1904," "Rural Mail Delivery," "The Grand Trunk Pacific Railway," "Agricultural Education," and "The Improvement of Farm Animals." These essays I have read and returned, with corrections and suggestions for improvement. In teaching English Literature, both prose and poetry, I have endeavored not merely to arouse the interest of the students in the text studied, but by frequent quotations and references to awake a lasting interest in English Literature as a great storehouse of knowledge and pleasure.

The course in Bookkeeping comprises business correspondence, commercial forms, and the keeping of farm and other accounts.

At the close of the winter term a course of six weeks' instruction was given for students who had not completed their matriculation. During this course I gave lectures in English Literature, Rhetoric, and Composition, and in English and Canadian History.

As Dean of Residence, it has been my duty to preside in the College dining hall, to inspect the residence building and furniture and have repairs made when necessary, to superintend evening study, to conduct roll-call and prayers, and generally to supervise the conduct of the students.

During the past winter term the regular routine of the residence was seriously interfered with by the quarantine and isolation regulations. With this exception, my work in charge of the residence has been most enjoyable. Realizing that the life in residence is one of the most important features of the college training, I have sought to develop among the students a wholesome college spirit, combined with a sense of individual responsibility. In this endeavor I have had your hearty support and co-operation, and it is gratifying to see the students exercising a manly self-control in their conduct, and learning to take pride in their college home.

The latter is in large measure due to the many improvements which have been made during the summer. These have added much to the attractiveness of the residence, both in appearance and in the better accommodation afforded. The wood-work has been repainted, the dining hall has been furnished with handsome new chairs, and is very much brighter and more pleasant; the kitchen has been enlarged and equipped with modern appliances. The addition of a baker to the kitchen staff has caused a marked improvement in the quality and variety of the fare provided. Also the addition of large and well appointed bath and wash rooms has aided much in promoting the convenience and cleanliness of the students. The advantages of these improvements are seen not only in the increased comfort of the students, but in a higher standard of conduct responsive to the greater refinement of their surroundings. However, though many changes have been made, one important addition has yet to be provided—lockers for the working clothes of the students.

In conclusion I wish to thank you for your sympathy and support, and for the many improvements which have rendered my duties more pleasant by creating among the students, a feeling of greater thoughtfulness and consideration.

Respectfully submitted,

F. H. REED.

PART III.

THE PROFESSOR OF PHYSICS AND LECTURER IN ENGLISH.

To the President of the Ontario Agricultural College:

SIR,—I have the honor to submit herewith my tenth Annual Report in the departments of Physics and English.

INSTRUCTION IN ENGLISH.

The work in English extends over the four years of the College course. It consists (1) a study of English authors, including Washington Irving, George Eliot, Macaulay, and Carlyle, prose writers; and Shakespeare, Milton, Wordsworth, and Tennyson, poets; (2) practical composition—the writing of essays and articles, continued through the four years; (3) practice in public speaking, with criticism by an officer of the College, in the second and third years.

English Authors. It is no longer necessary to apologize for the appearance on the curriculum of this branch of study. It is generally conceded that an acquaintance with the best writers in our language is part of the mental equipment of every well-informed man, be he farmer or physician. Within my experience the students here have always conceded this; nay, have urged it. Besides, the study of English authors, especially prose authors, is made the occasion for instruction in practical composition, the authors' choice of words, and their qualities of style generally, forming models for rhetorical analysis. The work in English authors is taken for the first and second years by the Dean of Residence, and for the third and fourth years by myself.

Practical Composition. It will doubtless be the fortune of very many of our students to contribute, occasionally or frequently, to the columns of agricultural journals. Next to success in his calling, nothing is more creditable to a practical farmer than to write calmly, intelligently, and *intelligibly* on matters pertaining to his business, or to the public welfare. Further, not a few of our students have aimed, and are aiming, at agricultural journalism as a profession. Our purpose in this branch of the work is, by giving students frequent practice in writing and by pointing out wherein they may improve these efforts, to make them masters of correct, strong, serviceable English. In this direction it is gratifying to note the improvement made from year to year. The work under this head is divided as is that in English authors.

Public Speaking. It is not exceeding the truth to say that the great majority of the students welcome the opportunity now afforded for acquiring some proficiency in platform speaking, and that the number who can acquit themselves creditably in this direction is increasing year by year. Of course,

there are some men who, by possession of marked aptitude for speech-making, would become proficient without the special training that the College affords. But, with considerable gratification, not to say surprise, I have observed the development of the unlikely man. While these classes aid all, they are of especial benefit to the man of average ability in speaking, for the diffident man who is unaware of his own powers. As frequently as time permits each man is given the opportunity to prepare and to speak on a subject, and a few minutes of each period are devoted to common sense criticisms of the speeches—criticisms touching upon the pupils' manner, voice, enunciation, diction, and choice or treatment of theme. The second year classes have been taken by Mr. Cumming, while last year and this year a little additional training has been given to the third year by myself.

It would be in the interest of the whole work in English if it could be placed under the charge of a professor appointed to that department. As it is now, while the English is nominally under my charge, I have the department of Physics also, which, to do it justice, would require the full time of the professor and the assistant; and the temptation to specialize in a branch of agricultural science, natural and proper at an agricultural college, is not favorable to another subject that happens to be joined with it under the same management. I therefore recommend that the appointment of a professor of English be early considered.

INSTRUCTION IN PHYSICS.

The instruction in Physics now covers the four years of the course for the B. S. A. degree. For the Associate degree the work of the first year includes Soil Physics and Mechanics. Owing to the readjustment of the work among the three departments, Animal Husbandry, Field Husbandry, and Physics, the instruction in Drainage and Tillage, in so far as the latter is related to the physical properties of the Soil—its texture, temperature and moisture—has been formally handed over to the Department of Physics. Accordingly it was thought best to place the elementary part of the work in Soil Physics and Tillage in the first year of the course, to take the place of part of the work in Field Agriculture that had formerly been given in the first year by the Department of Agriculture. The course in the second year comprises Surveying, Levelling and Drainage, Ventilation and Heating considered practically, Mechanics of Water Supply, Electricity, and other subjects that may be included under the term Agricultural Engineering. In the third year the Theory of Heat prepares the way for Meteorology, Cold Storage, and the Theory of Ventilation and Heating. The fourth year course consists of Climatology, or Climate in relation to Agriculture, and advanced work in Soil Physics.

A few words of explanation of some of the above subjects may serve to show their fitness to stand on the curriculum of an Agricultural College. The subject of Agricultural Engineering is a very wide one, of which we have as yet touched upon only the most important particulars. Under this subject, by means of instruction, demonstration, and practice, we aim to enable our students to measure their own farms and to map out their boundaries, physical features and subdivisions; to plan and to carry out systems of drainage that shall be suited to the particular circumstances of the sections to be drained, and to calculate beforehand the approximate cost; to devise and to carry out plans for a convenient water-supply, adapting the power to be used to the circumstances of the case, and contriving to bring water to the farm house and farm stables; to ventilate houses and stables; and to understand the

principles and the uses of machinery. The mastery of this subject, it may be observed, requires a knowledge of chain surveying, of methods of calculating areas, and of drawing plans and maps; it requires a knowledge of the properties of soil, their behavior toward water and air; a knowledge of hydraulics, of the laws that govern the flow of water; of mechanical devices, such as the windmill, the hydraulic ram, and of various types of pumps and motors; of the properties of air; and of mechanics. Since the object of this course is not to give scientific acquaintance merely, but practical mastery chiefly, the sciences that underlie these various topics have to be presented with care and discrimination lest the scientific aspect consume too much space. At the same time, I hold strongly to the opinion that a thorough mastery of *principles* underlying any practice is worth much more than a mere mass of facts, directions, and specifications.

Meteorology is the science of the Weather, and as such it is a perennially interesting subject. It leads one to observe, and enables one to understand, those wonderful natural phenomena, winds and storms, rain, hail, and snow, frost and heat, and the ever-varying forms of cloud and colors of sky. It is a branch of Nature Study, but it has its practical issues also. The Weather Bureau at Toronto issues daily forecasts of the weather for the next twenty-four hours. These forecasts are published immediately in various ways. Some years ago the forecasts were made known by colored flags carried on railway trains, but, while I believe the practice is still continued in some sections, the Bureau found that, owing to neglect of railway employees, the announcements thus made were unreliable. Another method of publication is by telegraph, central points being informed of the forecasts, from which points the news may be repeated by telegraph or telephone where required. Besides this, weather maps are issued daily and are distributed by mail as soon as the forecasts are made, and those in reach of the Bureau may receive the map on the same day as issued, and from it may make their own forecasts. To be forewarned is to be forearmed, and it is evident that if the farmer or the fruit-grower is aware of what the weather will probably be within the next twenty-four hours he may in many ways guard against damage and loss. The fruit-grower especially may, if he is aware of approaching frost, take preventive measures. Recently the editor of the *Canadian Horticulturist* suggested to me that I prepare a series of articles on Methods of Preventing Damage from Frost. I have in preparation an instrument that will give warning when the temperature has fallen sufficiently low to indicate probable danger from frost, and as soon as I have this tested, I expect to prepare the series of articles requested, dealing with various methods used to ward off frost from vineyards and orchards.

Climatology deals with the causes of climatic differences, with the factors of climate that distinguish one district from another, and with the effect of climate on agriculture. Under this head are studied particularly the climatic factors of the various provinces of Canada, the climatic limits for different species of farm produce, grains, vegetables, and fruits, and the suitability of any given section, climate and soil considered together, for any given variety of fruit or other crop. Not only is valuable information gained in this study, but the importance of considering climatic factors is emphasized, so that in introducing a new crop into a district, or in selecting crops for the new districts of Ontario and the Northwest, certain foregone conclusions may prevent costly experiments with unsuitable varieties. Exact information upon the climatic peculiarities of the new districts now being opened up cannot be too widely disseminated. It is our object in giving instruction and collecting information upon this subject, to disseminate such exact knowledge.

ADDITIONAL LECTURE COURSES.

Besides the work as outlined above for the regular College courses, I gave a series of lectures and demonstrations on Soil Physics and Climatology, to the class of teachers in the summer Nature Study course; a similar series to the Nature Study Class in the autumn term; a course of three or four lectures on Cold Storage to the Dairy Class last winter; a course on ventilation to the Poultry Class; and an address on Shipping Fruit in Cold Storage before the Experimental Union in December.

CORRESPONDENCE, ARTICLES, AND BULLETINS.

The correspondence of this department, while not heavy, is rapidly increasing. During the past year I have replied to many questions relating to subjects belonging to this department, such as ventilation, water power, conveying water from springs, creeks, and ponds to the house and stable, building cold storage houses, controlling temperatures in refrigerators, drainage, and tillage. Also, several samples of soil have been examined and reported upon.

During the year, I have contributed the following articles to the press: Lampman's Nature Poetry, Canadian Literature, Experimental Shipment of Fruit, *O. A. C. Review*; Experimental Shipment of Fruit, *Canadian Grocer*; Experimental Shipment of Fruit, The Western Fruit Market, *Canadian Horticulturist*; Fruit for the Market, Farmers' Institute Report; Ventilation and Heating, Water Supply for the Farm, *Farmers' Advocate*.

I have recently sent to the Department of Agriculture for publication a bulletin on "An Experimental Shipment of Fruit to Winnipeg," this bulletin being a report of a trial shipment in cold storage of various kinds of fruit from Southern Ontario. A summary of the results of this shipment may be found on another page in this report.

OUTSIDE WORK.

Apart from the College work I have given addresses during the year as follows:

At Cookstown, in June, an afternoon address before the Farmers' Institute on Tillage, and an evening address before the combined Mens' and Womens' Institute, on the Climate of Canada.

At Guelph, before the Teachers' Association, an address on the Climate of Canada.

At Toronto, before the Ontario Fruit Growers' Convention, a report of the Experimental Shipment of Fruit to Winnipeg.

At St. Catharines, before the Niagara Peninsula Fruit Growers' Association, a report of the Experimental Shipment.

In June I was enabled, through the liberality of the Minister, to visit the Department of Agriculture at Washington. In visiting Washington, I had two objects in view: I wished to examine in detail the method in use at the division of Soils for the mechanical analysis of soils; and to exchange views with the division of Pomology respecting experimental work in Cold Storage of Fruit. At each of these divisions I met the greatest of kindness and courtesy, and found Mr. Briggs and Mr. Powell, with whom I had the most to do, willing to afford me every assistance in gathering information. At the division of Soils I was enabled to follow through a complete soil analysis, and have since put into operation in our own laboratory the method used there. We have now a complete, accurate, and rapid method of soil analysis in place of the old method, which was slow, laborious, and cumbersome. In detail, the method consists in drying a quantity of the soil at a temperature

of 110 degrees C, then weighing out a definite quantity and sifting this through a 2 millimeter sieve to remove the gravel. What passes through the sieve is known as fine earth, and from this fine earth 5 grams are weighed out, and put into a flat 8-ounce bottle, with about 2 ounces of distilled water and a few drops of ammonia. Eight soils are treated in this way, and the eight bottles placed horizontally in a shaker, and are then shaken for about ten hours. A small electric motor with the aid of a pulley-frame for reducing the speed runs the shaker. After shaking, the soils, with the water, are placed each in a test tube in the frame of a centrifuge, and the soils are whirled for three minutes by means of another electric motor, to precipitate the sand and the silt. What remains in suspension after the whirling is clay, and is poured into the sink, the amount of clay in each sample being determined by difference. The test tubes are filled again with water, the soil stirred up, and this operation is repeated until at the end of three minutes' whirling the water in the test tubes stands clear. Thus one constituent, the clay, is separated. Next, the test tubes are transferred to a rack, and filled in turn with water under pressure poured through a small glass nozzle. If the eight tubes are filled at the proper rate, after the filling of the eight, the water in the first, with the soil suspended, may be poured off into a beaker. The time between filling and decanting is determined by taking a sample from the first tube next the bottom, after the eight are filled, and examining this sample with the micrometer. If the largest particles are .05 millimeter in diameter, the time allowed for settling is right, and the operation may be repeated until, when the eight have been filled, the first stands clear. The sample contained in these decantings is silt, which is dried and weighed.

The final operation consists in drying the residue at the bottom of the test-tubes and sifting through fine sieves and bolting cloth, which gives the different grades of sand. Eight samples of soil can be analysed daily by this method.

At the division of Pomology I was given the benefit of the experience gained there in the cold storage of fruit. My particular object, however, was to gather some information respecting shipment of fruit in cold storage, and I succeeded in gaining many valuable suggestions that I have since put into practice in the experimental shipment of fruit to Winnipeg. The business arrangements came under consideration—the terms by which the fruit is secured from the growers; the kinds of car used; the means by which proper transportation is secured; the details that should be noted in reporting the condition of the fruit at the shipping point and at the market; and the results obtained in shipping various kinds of fruit various distances.

LIGHTNING REPORT.

The amount of damage by lightning in 1904 exceeds greatly that of the previous year. The following analyses present the results of our reports for the four years, 1901-1904, inclusive:

	Elm.	Pine.	Oak.	Basewood.	Maple.	Ash.	Poplar.	Apple.	Hemlock.	Willow.	Beech.	Chestnut.	Balsam.	Hickory.	Butternut.	Total.
1901	7	8	1	5	2				2			1				28
1902	6	1	5	2	4	2	1			1	1		1	1		25
1903	5	3	1			1	1	1		1						13
1904	6	4	1			1	2	2							1	17
Total ...	24	16	8	7	6	4	4	3	2	2	1	1	1	1	1	81

	Animals struck.					Buildings struck.	
	Cattle.	Sheep.	Horses.	Hogs.	Total.	Barns.	Other buildings.
1901.....	33	7	11	1	52	26	6
1902.....	22	47	17	3	89	39	19
1908.....	8	1	2		11	24	8
1904.....	32	9	8		49	62	19
Total.....	95	64	38	4	201	151	52

The number of barns reported as struck this year is sixty-two, of which thirty-three have reported losses. The total loss of barn property reported is \$82,450, making an average loss of \$2,500. These figures, of course, refer to barns completely burned, in most cases with part or the whole of the season's crop. Of the sixty-two barns reported as struck, fifty-four were completely burned. Applying the above average loss to these fifty-four, there is the enormous total of \$135,000 loss in Ontario from the destruction of barn property alone by lightning, and these figures do not represent the total loss, since our reports are necessarily incomplete, and the eastern part of the Province is not nearly so well reported as the western part.

Of the total number of reports received, most of them were obtained from newspapers, and full particulars as to circumstances were not obtainable. We obtained, however, nineteen complete reports of barns struck. Of these nineteen, sixteen were isolated, with no trees or buildings near. Of the sixteen, fourteen were burned. Only one of the nineteen is reported as being situated near high trees, and this one was near some poplars, and was slightly damaged. Of the whole sixty-two reports, no mention is made of the buildings being rodged. Of the nineteen complete reports, none of the buildings was rodged. In one instance a windmill over the barn was struck first and the current side-flashed into the building from this source, and the building was burned.

In my previous reports under this head I have called attention to the evident effect of trees in protecting farm buildings. While there is no absolute proof, either from this year's reports or from previous years, there is in all of them strong presumptive evidence as to the efficiency of this means of protection. The planting of trees, such as spruce, elm, or maple, near enough to buildings to protect them, but not so near as to endanger them, is strongly recommended. The trees should be planted at such distance that when full grown their branches will not touch the buildings.

The electric storms this year seem to have been unusually destructive of human life. Sixteen persons are reported as being struck by lightning, of whom thirteen were killed outright. Five of these who were killed were standing under trees and two were in houses. The danger of accident to persons standing under trees during an electric storm ought to be sufficiently evident to prevent the recurrence of this exposure. It is certainly very unsafe to seek refuge of this sort during thunderstorms.

Forty-nine animals are reported killed, with a total estimated loss of \$2,010. Of the forty-nine, twenty-five were under trees, and nine were standing in the open field. One is reported as near a wire fence; three in a bush; with the remainder the circumstances are not specified.

Of the various dates on which storms occurred, two stand out most prominently: July 27-28 and August 13-14. Either these storms prevailed only in Western Ontario, or our reports from Eastern Ontario are sadly lacking; at any rate, in both of these the destruction reported is west of Toronto. The territory covered by the storms on these dates is as follows:

July 27-28.—Grey, Bruce, Perth, Wellington, Oxford, Simcoe, Elgin, Welland.

August 13-14.—Peel, Halton, Wentworth, Elgin, Waterloo, Oxford, Wellington, Lambton.

I wish to thank all those who have assisted in the collection of these reports. The practice has been to send out blank forms to ex-students of the College and to many others who have signified a willingness to report occurrences of loss or damage by lightning. This year, in addition to this source, we have been aided greatly by the newspapers of the Province. At the beginning of the season I sent circulars to the various newspapers of Ontario, requesting that a sample copy of papers containing lightning reports be sent to this department. Many of the papers have very kindly assisted in this way, and thus I think our reports are more complete than in previous years.

THE SHIPPING OF FRUIT TO WINNIPEG BY FREIGHT.

In September of this year I arranged for the loading of two cars of fruit, one at St. Catharines and one at Grimsby, to be shipped to Winnipeg by freight. The varieties of fruit were: Peaches, plums, grapes, pears, apples, and tomatoes. The object of the shipment was particularly to find out how, under the best conditions of packing, loading and icing, certain tender fruits would carry from Southern Ontario to Winnipeg. The secondary objects of the shipment were: to examine into the whole question of handling the fruit at the shipping point, the question of transportation, and that of marketing.

At the shipping point boxes were used exclusively, the bushel box for apples, the half bushel box, 5x11x20 inches, for pears, and a box of similar dimensions for peaches—the pears in most and the peaches in all instances being wrapped in paper. Grapes were shipped in a Wilson crate, consisting of a bushel box containing 12 cardboard trays holding about 2½ pounds each. Plums were shipped some in this crate and some in a 2-basket crate, consisting of two 10-pound baskets enclosed in a strong container.

The cars were loaded after the California method, by placing the packages on their sides in a row across the car with spaces between the boxes about an inch wide. Across the top of the row along each end was nailed a strip which butted against the sides of the car and was nailed securely to each package, the nail passing through the wooden strip and into the head of the package. This was repeated, row above row, until a tier was completed as high in the car as we wished to go; then another tier was placed in the same fashion butting against the first. Thus each box was held rigidly in place and between the boxes there was an opportunity for circulation of air.

The time of transit was for the first car eight days, and for the second car seven days. The fruit without exception arrived in good condition. The prices obtained were as followed: XXX Crawford peaches 85 to 90 cents net, after deducting for freight charges, commission, and cost of the package; plums, in terms of the 11-quart basket, 47 to 54 cents net; grapes, in terms of the 11-quart basket, 40 to 50 cents net; pears, per box, realized as high as 83 cents net, although some sold very much lower on the second day; apples, 40 to 50 cents a bushel for well-colored varieties, 25 to 30 cents for others. These prices are all for XXX stock.

Summary.

1. The Western market demands well-colored and well-matured fruit.
2. Both in appearance and in prices, Ontario peaches, if allowed to mature properly on the tree, compare favorably with California peaches on the Winnipeg market.

3. California and British Columbia, although at a much greater distance than Ontario, are fast getting a monopoly of the Western market.
4. Owing to tariff and higher freight charges, California peaches, in competition with Ontario peaches, suffer a handicap of 40 cents a box.
5. In carload lots, freight rates to Winnipeg, including icing, are little more than one-third express rates. Quickly ripening fruit is safer in a good refrigerator car for six or eight days than in a hot unventilated express car for three days.
6. Transportation ought to be no hindrance to a large expansion of trade in tender fruits between Ontario and the Northwest. Peaches, plums, grapes, and Bartlett pears, well-matured, carried safely with eight days' transit. A transit of five days over the same route is frequently accomplished, and is quite practicable.
7. Our fruit is at a disadvantage in the market because of the general lack of uniformity, neatness, and skill displayed in grading and packing.
8. A uniform size and style of package is very desirable. So far as possible, all box packages should be of the same length and width, and should vary in depth to suit the character of the fruit.
9. So far as rapid cooling and safe shipping in cold storage are concerned, the barrel is suited to winter apples, the bushel box, 10x11x20 inches, to early fall apples and winter pears, and the half bushel, 5x11x20 inches, to peaches and early pears.
10. The basket carries grapes and plums satisfactorily, but, for safety, it should be enclosed, as in the Georgia 6-basket carrier, or the 2-basket carrier.
11. To remedy existing defects in all departments of the fruit trade, and to put it on a secure footing, the co-operative plan should be adopted, including a central packing house, the employment of expert packers, and an organization capable of overcoming obstacles.

Remarks on the Experiment. While at Winnipeg I took the opportunity of observing the class of fruit on the market there. I found displayed in the shop fronts peaches from California and Idaho, grapes and pears from California, but, up to the time of the sale of our two lots of fruit, no Ontario peaches could I see in Winnipeg, very few grapes and very few pears. On the way home at Allandale I noticed on the station platform a fruit stand, and this stand bore the California pears and California grapes, but no Ontario fruit. At Guelph, upon my return home, there again I saw California fruit with its well-known style of package displayed in some of the stores. This state of things is not in keeping with the fact that in Ontario we can produce the very best quality of these classes of tender fruits. True, while there is no excuse for foreign fruit being found on our local markets at the time of the year when these fruits are fully in season in Ontario, yet there are undoubtedly obstacles to a trade with Manitoba and the Northwest Territories. These obstacles are, as represented by our fruit-growers: First, our fruits are not of good shipping quality; secondly, transportation is not satisfactory; thirdly, markets are uncertain and commission men and others who handle our fruits do not always give satisfactory returns. With respect to the first of these, namely, the good shipping quality of our fruit, we have up to the present underestimated this quality. Our fruits, if properly handled at the shipping point and in transportation, ship very much better than is generally understood. As to the other obstacles, transportation and markets, there is undoubtedly much room for improvement, and it was the object of this particular shipment, not only to investigate the shipping quality of our tender fruits, but also to make a full inquiry into the transportation and market conditions that surround our fruit trade.

Defects at the Shipping Point. My conclusion, after following out this experiment from the very beginning, examining the fruit offered at the shipping point, following the cars to their destination, and examining the fruit again at the market, is this: that the greatest obstacle in the way of a complete success in shipping fruit to distant points is to be found at the shipping point itself, and conditions there must be entirely altered before any degree of success can be looked for in this business. Ontario fruit-growers have exhibited a large degree of intelligence and skill in selecting the varieties suited to their soil and climate, in battling with pests of all kinds that have invaded their orchards, and in cultivating and improving their soils. For the intelligence and enterprise displayed in this direction our fruit growers deserve great credit, and it is no discredit to say that their time and attention have been so fully occupied with these things that they have not as yet given the needed attention to the matter of marketing their fruit. But it is the marketing of the fruit that is now defective, that is to say the selecting of the fruit of proper degree of maturity, grading it in uniform sizes, using proper styles of package, packing neatly and effectively; and toward these things the fruit-growers must direct their attention before success can be achieved.

Proper Degree of Maturity. To mention some of the particulars in which improvement should be made, I might begin with the selection of fruit of the proper degree of maturity. The impression prevails largely that in order to ship tender fruits to a distant market, requiring five, six, or more days in transit, these fruits must be picked hard and green. The results of our experiment, as well as those of experiments conducted on a large scale at Washington, point definitely to the conclusion that all fruits should be left on the tree until they have attained their characteristic size, color, and flavor, but should be, for distant shipment, picked in advance of dead ripeness. It is evident, then, that the matter of picking the fruit from the tree is one requiring more or less expert knowledge, and should not be left to irresponsible and uninstructed persons. For apples and winter pears, the period when picking may properly be done is apparently a wide one. For quickly ripening fruits, such as peaches, plums, early pears, or early apples, the period when the picking of any particular specimen should be done is a narrower one, covering, perhaps, not more than a day or two, and the trees should be gone over as frequently as this and the mature specimens removed. If fruit is picked before it has attained its size or color or flavor, it will never develop these off the tree. If picked later than this critical period, the fruit is dead ripe, and, while suited to immediate consumption, will not ship any distance. For any purpose whatever fruit should not be picked before this critical period arrives. There is nothing to gain and much to lose by premature picking. It is doubtful even if fruit will hold much longer when picked in the green and immature state than when picked at the proper degree of maturity. Even if it does hold some what longer, it is not worth while, it is detrimental to the reputation of our fruit, to ship stuff to distant markets immature and undeveloped. If upon being picked at the right time, fruit will not ship to any particular point, then it is the business of the fruit-grower to exploit markets nearer home.

Packages. Much improvement may be made in the second place in selecting packages of correct size and shape for shipping the various classes of fruit. If a freight business to the Northwest is to be made a success, it must be in carload lots, and I believe that for the present at least small lots of each kind will yield better prices on the Winnipeg market than a carload lot of the same kind of fruit. Therefore, shipping carloads of mixed fruits will likely receive the attention of the fruit-grower in the immediate future, and for this purpose packages of some uniform shape should be adopted, so

that whether apples, or pears, or peaches are shipped, the packages will fit together in the car. This end can readily be gained by using, for fancy apples and winter pears, the bushel box already adopted by the Ontario Fruit Growers' Association, 10x11x20 inches; for early pears and peaches, a box one-half this size, 5x11x20 inches; then for plums and grapes, the bushel box with open sides for ventilation, containing six 4-quart baskets, after the pattern of the Georgia peach carrier, may profitably be adopted. If these suggestions are followed, we shall then have, for all classes of fruit, packages which will fit together in the car, and which, furthermore, are suited to the character of the fruit. It must be borne in mind that in selecting a package the principal consideration is, for quickly ripening fruits, the rapidity with which the fruit can be cooled when placed in cold storage, throughout the whole body of the package. It is important that fruit, such as peaches, plums, and early pears, should be cooled as quickly as possible to a temperature of 40 degrees, or thereabouts, and for this purpose a shallow package, say five inches in depth, will cool in about one-half the time which is required by the bushel box of the same length and width but 10 inches deep.

Packing. The next particular that requires careful attention at the shipping point, is the matter of packing the fruit, including grading to uniform size, the use of fillers, and wrapping paper. Of grading nothing need be said here, for the importance of it is surely understood by all, apart altogether from the legal aspect of the question. In packing, the first essential is that the fruit be packed tightly, allowing no room for jolting about in the package during transit. Many packers try to make up for looseness in packing by the use of fillers, such as paper and excelsior. While small quantities of these may be used occasionally with propriety, yet I am inclined to say that in our two shipments altogether too much of it was done, and the fillers were made to do duty for careless packing and want of proper selection of fruit. As to wrapping paper, all peaches and most varieties of pears will pay for wrapping, and the manila paper of medium weight is preferable to the thin light tissue paper which is sometimes used. Paper with some strength and consistency will take the pressure and strain which otherwise would fall upon the tender skin and flesh of the fruit. In the selection of a wrapping paper, it should be of a size suited to the size of the fruit, so that when the fruit is surrounded by the paper there is just enough left to turn over and to cover the fruit all around. Anything larger than this is objectionable.

Freight and Express Rates. If by means of careful attention to these particulars at the shipping point a freight trade between Ontario and the Northwest in tender fruits can be established, it will mean a great deal to the Ontario fruit-grower. Between freight and express, fruit properly packed and loaded is safer in the refrigerator car for six or eight days than it would be in the hot unventilated express car for three days, and in the matter of charges, freight rates are a trifle more than one-third of express rates, in carload lots. For instance, the express charges on a box of peaches from Southern Ontario to Winnipeg are 42 cents, the freight rates 14.8 cents; for a box of pears of twenty-five pounds, express rates are 52 cents, freight 18½ cents.

It is evident to all who have made a careful study of this question that the various difficulties in the way of establishing this business can be overcome for the average fruit-grower in no other way than by co-operation. Co-operation will give the fruit-growers strength to deal with the railway companies, to compel from the latter proper regard for their rights, and, furthermore, the added business which would result from co-operation would make it appear to the railways more and more worth while to give the matter of fruit transportation the attention it will then deserve. Also, the strength of

an organization will be able to grapple successfully with the problems of marketing, which at present it is difficult, if not impossible, for the private shipper to do. Then at the shipping point the co-operative concern will take charge of the whole business of selection of the packages, grading, packing, and shipping of the fruit, thus relieving the individual fruit-grower from the necessity of attending to these exacting details, and giving him time to attend to his legitimate business of producing prime fruit.

SOME NOTES ON DIMENSIONS OF PACKAGES IN RELATION TO COOLING.

The question of size and shape of package to be used in shipping or storing any particular variety of fruit is highly important: important not merely in respect of cost and convenience of package, or the degree of firmness of fruit that will sustain the weight of the fruit above it in the package; but important more especially on account of the rate at which the whole of the fruit in the package will cool to the temperature of the refrigerator. Slowly ripening fruits, such as winter apples and winter pears, may be safely packed in a case that cools slowly. But quickly ripening fruits, to be preserved, must be cooled very quickly to a temperature of 40 degrees or below, in order to delay the ripening and decaying processes. With a peach that will ripen and begin to decay two days after picking, a few hours' delay in cooling will make relatively a great difference in the length of its life. For such fruits as this, a package must be used that allows the most rapid rate of cooling.

With these principles in mind, the following temperature tests were made at the Cold Storage Warehouse at the Agricultural College. Four packages were filled with apples, and long thermometers were inserted in the midst of the fruit, the bulbs being at the centres of the packages and the stems and reading scales standing out of the packages in view of the observer. The packages were then headed, placed in a warm room and kept for a week until they reached a uniform temperature of 64 degrees F, and then were transferred to a room in the warehouse that is kept at a temperature of 32 degrees to 34 degrees. The packages were:

- (1). An ordinary large apple barrel.
- (2). A bushel box 10x11x20 inches, with close joints practically air-tight.
- (3). A Georgia peach carrier 10x11x20 inches, with open spaces at sides; the fruit within was packed in the 6 baskets and among these baskets were empty spaces permitting circulation of air.
- (4). A half-bushel box 5x11x20 inches, with open spaces at sides, bottom, and top.

RESULT OF TEMPERATURE TEST.

Package.	Times of observation.	Amount of cooling.
(1)		
Barrel	a.m. p.m. hours 10.30—2.00, 3½	64.5—60.5 = 4°
Bushel (closed joints)	" " 3½	64.5—57.5 = 7°
" (open)	" " 3½	64.5—64 = 10½°
Half bushel	" " 3½	64—51 = 13°
(2)		
Barrel	p.m. p.m. hours 2.00—8.00, 6	60.5—57 = 3½°
Bushel (closed joints)	" " 6	57.5—50 = 7½°
" (open joints)	" " 6	54—43 = 11°
Half bushel	" " 6	51—40 = 11°
Total.		
Barrel	a.m. p.m. hours 10.30—8.00, 9½	64.5—57 = 7½°
Bushel (closed joints)	" " 9½	64.5—50 = 14½°
" (open joints)	" " 9½	64.5—43 = 21½°
Half bushel	" " 9½	64—40 = 24°

The half-bushel, it may be seen, had cooled to a sufficiently low temperature, 40 degrees, in $9\frac{1}{2}$ hours; the Georgia crate, with open sides and open packing, cooled in the same time within 3 degrees of that temperature. By the next morning at 8 o'clock the half-bushel had cooled to 35 degrees, the Georgia crate to 35 degrees, the bushel to 39 degrees, and the barrel to 47 degrees. Two days after the commencement of the observations the barrel was still at a temperature of 38 degrees, 6 degrees above that of the room.

The application of these facts is obvious: Winter apples and winter pears may, so far as temperature and ripening are concerned, be packed in barrels. For winter pears, no package smaller than the bushel box need be used. Between the half-bushel and the bushel, there was in the above test a difference of 12 hours in cooling from a temperature of 64 degrees to 40 degrees; but this difference is insignificant with slowly ripening fruit.

For summer and early apples the barrel is too large a package, and much of this fruit shipped in barrels turns out badly by reason of the slowness of cooling. Where decay occurs it is usually at the centre of the package, because this is the last to cool. The bushel box, cooling at the centre in half the time that the barrel requires, is for this reason preferable to the barrel for early apples.

For early and quickly ripening pears, the bushel box is too large a package for best results in long shipments, unless it be in the form of the Georgia carrier with open sides, when it resolves itself virtually into a number of smaller packages with spaces between. The writer chanced to call upon a retail dealer at Winnipeg and found him unpacking some Ontario pears, Bartlett's, from bushel boxes. There was a marked difference between the pears next to the package and those at the centre. Those at the outside were still green and firm, while those at the centre were quite ripe, and many of them soft and pulpy. The use of the half-bushel box in this instance instead of the bushel, would have hastened the cooling of the centre of the package by 12 hours, and would likely have preserved the fruit at the centre.

All results of storage and shipping experiments concur in pointing out the necessity for quick cooling of tender fruits. Such fruits should be packed in shallow cases, and placed in a cold store as soon as possible after picking.

OBSERVATIONS AT AMERICAN COLLEGES.

I append herewith a report of some observations made by Mr. W. H. Day, Demonstrator in Physics, during a visit at some of the American institutions:

Early in the summer of 1904 I was privileged through the kindness of the President to visit several American Colleges of Agriculture to observe their methods of instruction and investigation, especially in physics of the soil. A few days were spent at each of the following places, in the order mentioned: Michigan Agricultural College, Lansing; Chicago; Wisconsin College of Agriculture, Madison; Iowa State College, Ames; World's Fair, St. Louis; and Illinois College of Agriculture, Urbana.

The organization and instruction in the various departments of agriculture at these institutions vary considerably. At Michigan the pure physics is taught by the department of Physics; the applied Physics by the department of Mechanics; and the Soil Physics, by the department of Agronomy. Students in agriculture take the elements of pure physics during their first and second years. In the department of Agronomy their first year work consists of a study from simple experiments of the effect of soil temperature and aeration upon germination and growth of plants; also tillage and drainage. Farm Mechanics is studied during the sophomore year. The third year is devoted to a study of the history and work of the Agricultural Department at

Washington, and to various problems for investigation, one to be solved by each two students. In the fourth year investigation is again carried on, preferably a continuation of work begun or suggested during the previous year. An extensive course in soil physics, soil mathematics, soil thermometry, evaporation, and soluble salts of the soil completes the physics of the course.

Prof. Jeffery, who with Prof. Shaw has charge of the work in Agronomy, was investigating the effects of manures in different quantities on the temperature of the soil at various depths. Also the validity of the conclusions reached in bulletin No. 22 of the Division of Soils, was under investigation.

The University of Wisconsin was in the midst of its jubilee festivities when I arrived there, so that the opportunities for observing the work here done were not so good as they otherwise would have been. In the intervals, however, Prof. Whitson found time to give me a pretty full idea of the work being done by the department of Soils. The green-house constitutes a special feature of the equipment of the soils department. A large green-house 70 feet by 42 feet is devoted to the work. It is divided into three sections, one consisting of shelves and tables for pot cultures; a second is furnished with 108 cylinders 4 feet deep, some 18 inches, others 36 inches in diameter, for experiments in soil fertility and tillage; the third is an open space for experiments in levelling, ditching, etc. To a question as to whether or not the space available was sufficient Prof. Whitson replied: "Where it is possible to divide the class into sections of twenty or twenty-five each, the space is sufficient, otherwise there would be crowding."

The students in the short course do no laboratory work in physics, and the instruction is of a strictly practical rather than a theoretical nature. The first two years of the "long course" are taken in the College of Letters and Science. The physics of those two years comprises the elements of general physics. The third year is devoted to (1) a study of the origin and classification of soils, and of the effect of their physical, chemical, and biological conditions upon the growth of plants; (2) a course of drainage, irrigation, and cultivation, with field and laboratory work; (3) climatology, a study of the distribution of heat, light, and precipitation and of their influence on soils and crops. In the fourth year the students take up advanced and original work in the origin and fertility of soils and their practical management.

In Iowa State College a department of Soils has been recently founded, which, under Prof. Stevenson, is doing good work. During the first two years a foundation in general physics is laid, but during the third year great stress is laid on soil physics and soil fertility, five periods a week being devoted to the subject during the entire year. This is equivalent to three lectures of one hour each and two laboratory periods of three hours each. Each man writes four essays, two on soil physics and two on soil fertility, during the first half of the year; during the latter half his laboratory periods are spent in research on some soil problem. For the research work in Soils, two fine green-houses, 20 ft. by 30 ft. with soil store-rooms attached, have been provided. In these, by means of pot cultures, the students investigate such problems as: The relation of legumes and the different species of bacteria; or the effect of different elements of plant food.

The field work done by the department of Soils is a special feature. A large number of 1-10 acre plots have been laid out. On any particular plot a certain combination of fertilizers will be sown from year to year; on another plot another combination, and so on. These plots are laid out in quadruplicate, and a four year rotation of oats, oats and clover, corn, and corn will be studied. Different methods of tillage are also tested. In this way the best methods of fertilization and tillage for such a rotation will be arrived at.

The teams necessary for the tillage of these plots belong to the department of soils.

The soil laboratory in the Education Building at the Fair was not in full operation—gas and water connection were still lacking—but the most approved apparatus from the leading Agricultural Colleges throughout the Union was on exhibition. Rough sketches were drawn of several pieces, some of which have already been placed in our laboratory, e.g. apparatus for tamping soil; also for testing the resistance of soils when puddled and dried.

Urbana, Illinois, was the last place visited. In Illinois \$25,000 is spent annually in soil work. A soil survey of the whole state is being made. Survey parties visit different sections, mapping and sampling areas as small as 10 acre fields. The samples are analysed by chemists and physicists. In every type of considerable distribution pot cultures are made, also 1-10 acre plots are laid out and treated in various ways, both for tillage and fertilization. Eighteen such local experimental farms are in operation under direction of the experiment station at the College.

The instruction in soils is similar to that in the other Colleges visited; during the second year, soil chemistry, during the third, soil physics, soil moisture, and capillarity, and during the fourth soil fertility.

Here, as at both Ames and Madison, soil green-houses were provided for the work of the department. The outstanding inference from the observations made is that if we in Ontario are to keep pace with the advancement our neighbors are making in soil work, we must be provided with green-house and equipment therefor. Many interesting problems await solution—problems that can be solved only when plants can be grown under controllable conditions. The green-house furnishes the means of doing so.

WEATHER REPORT, 1904, AT THE O. A. C., GUELPH.

	Jan	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	o	o	o	o	o	o	o	o	o	o	o	o	o
Mean temperatures	11.6	9.3	25.7	34.0	53.3	62.5	65.7	64.0	58.2	4.49	33.5	18.5	40.1
Departure from normal	-6.4	-6.3	-2.5	-7.7	-1.1	+0.2	-3.3	-2.0	-2.1	-3.5	-1.6	-3.0	-3.0
Lowest temperatures	-25.0	-19.0	0.0	17.0	34.0	41.5	42.0	42.0	30.0	20.0	4.0	1.0	25.0
Highest temperatures	38.0	51.0	49.0	62.0	83.5	84.0	90.25	84.0	81.5	72.0	54.0	44.0	90.25
Precipitation in inches:													
(Rain and melted snow)	0.85	2.54	1.44	2.10	3.01	2.86	4.99	3.88	2.80	2.04	0.10	2.06	28.66
Departure from normal	-0.67	+0.82	+0.14	+9.13	+0.59	+0.09	+1.18	+1.54	+0.26	+1.03	-1.28	+0.47	+2.25

Year.	Mean temp.	Date of last frost in spring.	Date of first frost in autumn.	Length of period without frost.
1899	42.1	May 15	Sept. 23	130 days
1900	45.6	May 10	Oct. 17	158 "
1901	43.1	May 15	Oct. 4	141 "
1902	43.3	May 11	Oct. 2	143 "
1903	44.4	May 5	Sept. 29	146 "
1904	40.1	April 22	Sept. 22	153 "
Average	43.1	May 8	Oct. 1	145 "

The weather of the year 1904 has been marked by large departures from the normal, both in temperature and in precipitation. The mean temperatures for January and February were over 6 degrees, and for April 7 degrees, below normal, and every month of the year but one fell below normal. The mean temperature for the year is 3 degrees below normal. Not only have

mean temperatures been unusually low, but for the winter months much lower minima than usual were reached: In January a minimum of -25 degrees in February -19 degrees, and in March 0.0 degrees. The total precipitation for the year amounted to 28.66 inches, an excess over the mean of 2.26 inches. In nine months of the twelve the precipitation was larger than usual, the greatest excesses occurring in July and August, while October and November were unusually dry. This report for Guelph represents fairly well the conditions over Ontario. For the winter somewhat more snow fell than usual over Ontario, although at Guelph less than usual. On account of the extremely cold weather, most of the snow that fell stayed, except in the extreme south. Generally, therefore, there was a larger accumulation of snow. But from Toronto westward along the lake shore, through the Niagara peninsula and in the Lake Erie district, the early snow thawed and formed a coat of ice, which was destructive to fall wheat and strawberry plants. Where the snow stayed, these crops wintered well.

The low temperatures of the winter played havoc with fruit trees, vines and berry canes. Peach and plum trees suffered severely, as well as some varieties of grapes and of apples, from root-killing. The past winter has proved the efficiency of cover crops as a means of protecting the roots of the trees. The continued cold of March and April was rather favorable to fruit, since it delayed growth and budding, and saved the trees and vines from further set-backs that might have resulted from late spring frosts. After the spring once set in, no late frosts occurred, and May and June were fairly warm.

The season as a whole has certainly demonstrated the climatic necessities of many of our most important crops. The crop of peaches was small, and plums were almost a failure. Grapes were a good crop, but the cool season failed to ripen them at the usual time and many were caught by the early autumn frosts. All fruits were ten days or two weeks late in ripening. The season was too cool and wet for corn, and a poor crop generally is reported. Oats, wheat, and barley generally did well, and they have shown their adaptability to a wide range of climatic conditions.

We are reminded that Southern Ontario is the northerly limit for such crops as corn, peaches, and grapes, and that a slight lowering of the annual temperature will put these important products to great hazard. The fact is enforced that we must exercise every precaution in the selection of varieties, locations, and soils, and in cultivation and protection, so that these foster crops that originally belonged to a warmer climate, may continue to justify our experiments in transplanting them into the midst of the strenuous climate of Ontario.

INVESTIGATIONS.

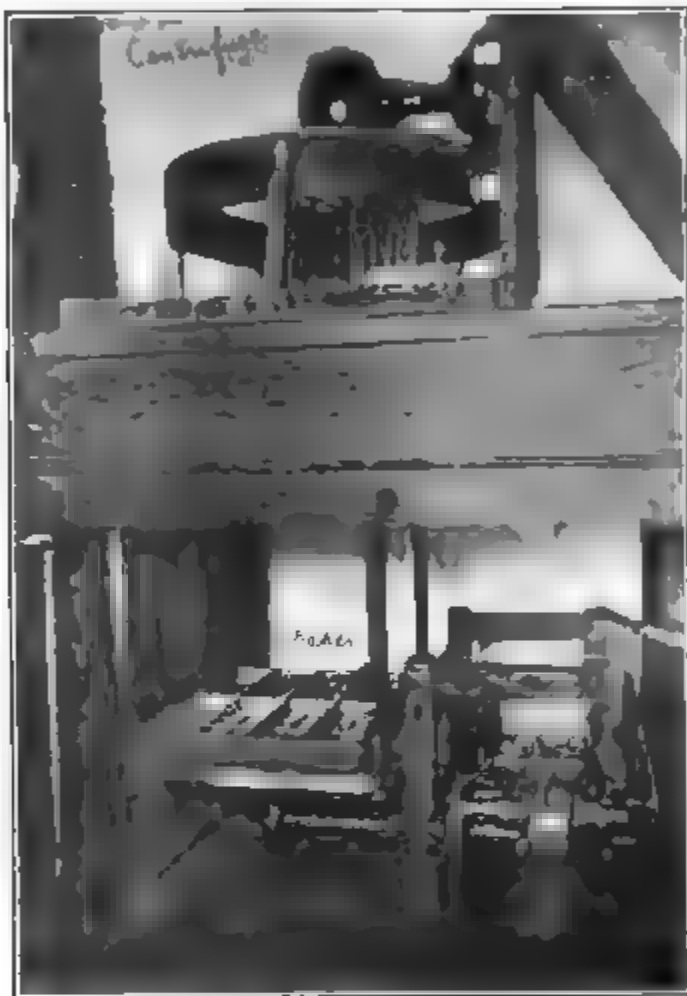
This department has under way the following lines of investigation:

Cold Storage of Fruits. This investigation is conducted in co-operation with the Department of Horticulture, and has been continued for two years. It is expected that a report of the work will be published shortly.

Soil Temperature at Different Exposures or Slopes. Daily observations were made of temperatures on a western slope and on level land, throughout the season. No report is being made on this work, as it has been decided to continue it and to confirm conclusions before publishing. The observations of soil temperatures at different depths has been continued, but the results are not reported here, and are being held over to make part of the general report on soil temperatures.

About seventy-five samples of soil, particularly from New Ontario, have been sent to this department for analysis. Some of these have

been analysed, and as soon as the work is completed it will be made public in some form. We aim ultimately to obtain a soil map both of Old and New Ontario, particularly of New Ontario, so that the agricultural capabilities of new sections may be known before hand without experimenting on the part of the settlers. We hope soon to have this information available, and last year were working with the Crown Lands Department for the collection of soil samples from the newly surveyed areas in New Ontario.



SOIL ANALYSIS (See page 23).

EXTENSION OF THE WORK IN SOIL PHYSICS.

Early this year an arrangement was reached for the readjustment of the work in Agriculture. The department of Physics has taken over part of the instruction in field agriculture formerly given by the Agriculture department. This addition of work will be distributed over three years, the First, Second and Fourth Years. In the First Year we aim to take the subject up as practically as possible with a view to studying the principles of the tillage of the soil, the control of the moisture, heat, and air supply, and the soil texture. This will include a consideration of the uses and adaptabilities of different implements to the various operations in the field. In the Second Year the work of drainage will be considered, principally the value of drainage and the engineering methods of installing a system of drainage. In the Fourth Year the science of soil physics will be considered more in detail and the practical questions of tillage and drainage will be enlarged and extended.

Respectfully submitted,

J. B. REYNOLDS.

PART IV.

THE PROFESSOR OF BIOLOGY AND GEOLOGY.

To the President of the Ontario Agricultural College :

SIR,—I have the honor of presenting herewith my Seventh Annual Report on the work done in the Biological department.

As in previous years, the duties of this department may be grouped under three heads: (1) Instruction; (2) Outside work, including correspondence and the preparation of special articles for the press; and (3), Investigations regarding weeds, fungus diseases, and insects.

I. INSTRUCTION.

The major part of the time of myself and my assistants has been occupied during the past year in the work of instruction; in fact never since I assumed charge of this Department has our time been so fully occupied with the instruction of classes. It is gratifying to know, however, that the students and graduates of this college are not satisfied merely with the so-called practical aspects of agriculture, but are demanding a good, firm foundation in the sciences upon which they are able to build a solid superstructure. The very thorough courses in biology, physics, and chemistry are, I believe, responsible largely for the splendid work achieved by our students in the later years of their College course and after they leave College. Courses in Biology are thoroughly practical, and emphasize the practical side of instruction.

Following is a brief synopsis of the regular courses given in 1904 in Botany, Entomology, Zoology, and Geology:

BOTANY, First Year. (a) Field excursions, where the student familiarizes himself with the names of the common wild plants, learns their manner of growth, and the ways the fruit and seeds are produced and disseminated; (b) Laboratory studies of the entire plant, including root, stem, leaves, flowers and fruit; and (c) Lectures summarizing and illustrating the practical work—by Mr. Hotson and Mr. Jackson.

BOTANY, Second Year.—(a) Field excursions and laboratory studies in the morphology of plants, especially those plants of economic importance, and their classification; a critical study of weed-seeds, and an elementary course in the study of grasses and fungi; (b) Lectures (two every week) on the morphology, classification, and physiology of plants,—by Professor Lochhead, Mr. Jarvis, and Mr. Jackson.

BOTANY, Third Year. (a) Laboratory and lecture courses in systematic botany, including grasses—by Professor Lochhead; (b) Laboratory and lecture courses in Structural Botany—by Mr. Thompson; (c) Lecture and laboratory courses in plant physiology—by Mr. Hotson.

BOTANY, Fourth Year. Specialists in Horticulture. (a) Laboratory and lecture course in plant histology—by Mr. Hotson and Mr. Thompson; (b) Laboratory course in fungi and plant pathology—by Professor Lochhead; (c) Seminary and practical course in plant physiology—by Professor Lochhead; (d) A laboratory course in the study of cultivated plants—by Mr. Jarvis.

BOTANY, *Fourth Year.* Specialists in Agriculture. Lectures and laboratory course in grasses and forage crops—by Professor Lochhead.

ENTOMOLOGY, *Second Year.* A course of thirty-five lectures, demonstrations and practical exercises. The chief insect pests of the farm, orchard, and garden are discussed and studied, under Professor Lochhead and Mr. Jarvis.

ENTOMOLOGY, *Third and Fourth Years.* This course, consisting of lectures and practicals, deals with both beneficial and injurious insects, and is a continuation of the second year course. Here the students become acquainted with the literature of the subject—by Professor Lochhead and Mr. Jarvis.

ZOOLOGY, *First Year.* This course consisted of lectures and practicals, thirty in all. The chief animal types from the Amoeba to Mammals are discussed and much attention is given to the Birds and Mammals of the farm—by Mr. Hotson.

GEOLOGY, *First Year.* A course of thirty lectures and demonstrations, dealing with the common minerals and rocks, the chief agencies operating in the formation of soils, and the geological history of the rock formation of Ontario—by Professor Lochhead.

GEOLOGY, *Third Year.* This course is a continuation of the first year course; but it is of a more practical nature, because the class is smaller. Considerable attention is given to the formation of soils through glacial action, and the geological history of North America is studied with special emphasis on the Canadian region—by Professor Lochhead.

NATURE-STUDY. In addition to the courses outlined above, this Department directed three separate classes in Nature-Study. The first class, the Third Year students, was carried on from April 17th to June 1st (six weeks). Special out-of-door studies of spring vegetation, insects, birds, pond life, &c., as problems for investigation, were made by each student, who was required to make full reports, and to give an address before the remaining members of the class on some study he had completed. Mr. T. Otway Page, B.A., as in the previous year, conducted the work in Bird Study, and to him we are indebted for much of the enthusiasm displayed by the class. The second class, consisting of Public School Teachers, was conducted at the Macdonald Institute with the assistance of Dr. Muldrew, Mr. Jarvis, and Mr. Evans during July (four weeks). The studies were of a more elementary character, and were specially adapted for Public School Teachers who wished to introduce Nature-Study into their schools. The third class, composed of teachers from Prince Edward Island, Nova Scotia, New Brunswick, Quebec, and Ontario, was carried on from September 15th to December 15th (three months). On account of the untimely death of Dr. Muldrew, the burden of the work of directing this class fell upon Mr. Jarvis and myself. (See Report of Nature-Study Department of Macdonald Institute).

WEED SEEDS. Instruction was also given by Mr. Jarvis to the Short Course Students in January last on *Weeds and Weed Seeds*, to the end that more attention be given to clean-farming. This course was a practical one, and every student was made familiar with the chief weed seed impurities that are liable to occur in alsike, red clover, and timothy.

STAFF. During the year several changes were made in the personnel of the staff of this Department. The resignation of Mr. J. W. Hotson, M.A., in June to assume the duties of Principal of the Macdonald Consolidated School at Guelph, made it possible to promote Mr. T. D. Jarvis, B.S.A., to the position of Lecturer in Biology. Mr. V. W. Jackson, B.A. (Queens), was appointed Demonstrator to fill the vacancy caused by the promotion of Mr. Jarvis. On account of the large amount of extra work devolving upon this

Department in giving instruction in Nature-Study it became necessary to appoint another Demonstrator. Mr. J. W. Hagan acted in this capacity for six weeks, when he was succeeded by Mr. E. Thompstone, B.Sc. (Edinburgh). I wish to place on record the good work done by Messrs. Hotson and Jarvis, who have shown themselves as in the previous year, to be capable and painstaking instructors, and by Messrs. Jackson and Thompstone, the new members of the staff, for the zeal and enthusiasm which they have displayed in the conduct of the classes committed to their charge.

II. OUTSIDE WORK.

The correspondence of the Department related mainly to the depredations of insects and fungi, about which inquiries were made by farmers, fruit growers, and gardeners.

Acting under instructions from the Deputy Minister and yourself, Prof. Harcourt and I carried out a series of experiments at St. Catharines for the purpose of testing the relative efficiency of the McBain Carbolic Mixture and the lime-sulphur wash, against the San José Scale. We also tested the new methods of preparing lime-sulphur wash by the use of sal-soda and caustic soda with the lime and sulphur without boiling. The results of these experiments will be found in detail in the Annual Report of the Entomological Society of Ontario for 1904.

Some attention was also given to a study of the Black Rot in a vineyard near St. Catharines belonging to W. H. Bunting, and in the vineyards of Northern Ohio, which I visited during the last week in August at the suggestion of the Minister of Agriculture. The results of my observations will be found in the Annual Report of the Fruit Growers' Association for 1904.

I gave an address before the West Middlesex Teachers' Association held in London, May 5th, on "Insect Life as a Nature-Study."

At the annual meeting of the Entomological Society of Ontario, held in London October 26th and 27th, I presented the following papers: "Injurious Insects of 1904," and "Some Recent Experiments with Lime-Sulphur Washes Against the San José Scale." I also delivered the President's address, taking for my subject: "Recent Progress in Economic Entomology."

At the annual meeting of the Fruit Growers' Association in Toronto, November 18th, I gave an address on the "Black Rot of Grapes."

I attended the annual meeting of the American Association of Economic Entomologists held in St. Louis on December 28th-30th, 1903, where I read a paper on "Some Injurious Insects in Ontario." I attended also, with your permission, the annual meeting of the same Association held in Philadelphia during Christmas week, 1904.

THE MUSEUM. As Curator of the Museum, I take pleasure in recording "progress" in the placing of exhibits during the year. *The Birds of Ontario* are now nicely arranged in the four new upright cases purchased this year, and are available for study by nature students. To Mr. A. B. Klugh, of Guelph, we are deeply indebted both for the arrangement of this valuable collection, and for the notes on the special cards beside the specimens, and I take this opportunity of calling your attention to the valuable work he has done. Already many visitors have expressed themselves as being well pleased with the educational features of the collection.

The Collection of Wax Fruits, modelled and colored by Mrs. Potter, under the supervision of Prof. H. L. Hutt, has been arranged very admirably by Prof. Hutt and Mr. Peart of the Horticultural department in five new flat cases. This collection, I need hardly say, is perhaps the most interesting of all to the general public, and it cannot fail to help our fruit-growers to a better naming of the varieties in their orchards.

Prof. Harrison has arranged in the south-west corner a very instructive *Bacteriological exhibit*, which gives the visitor some idea of the work done by the Bacteriological department for the advancement of agriculture.

The *collections of minerals and rocks* are not yet arranged for want of suitable cases. We need at least five more upright cases, and five more flat cases before we can display properly the many exhibits in our possession, as well as those promised by the Physical and Chemical departments. An appropriation of \$1,000, is therefore urgently needed. An effort should be made during the coming year to procure material to illustrate the progress of agriculture in this Province in the matter of implements of tillage, etc. Such a collection would not only be interesting, but also instructive and valuable in future years.

The following additions were made to the Museum this year:

1. A collection of shells, &c., from Florida, presented by Mr. A. G. Reynolds, of Diston City, Florida.
2. A collection of woods and cones from California, presented by Roland D. Craig, B.S.A., F.E.
3. Diagrams of our native trees, with frames made from the wood illustrated in diagram.

ARTICLES CONTRIBUTED TO THE PRESS, AND SPECIAL PAMPHLETS. "The Plum Rot," "The Raspberry-Cane Borer," "School Gardens for Teachers," "Black Rot of Grapes in Ohio," "An Apple Tree that has Died, and Why," for the *Canadian Horticulturist*: "Fall Cleaning in the Orchard," as a *Press Bulletin*, (October); "Advantages of Nature-Study in Rural Schools," for the *Farmers' Advocate*, (October); "Black Rot of Grapes," and "Nature-Studies," (Editing) for the *O. A. C. Review*.

Two pamphlets entitled "Outlines of Nature Studies" were printed for the use of the Classes in Nature-Study. The first pamphlet contained studies suitable for spring investigation; the second, studies suitable for autumn.

In the preparation of Bulletin 134, entitled "Hints on Making Nature Collections in Public and High Schools," by Dr. Muldrew, I contributed the sections dealing with Insects and Aquaria.

OUR NEEDS. We are deeply grateful for the commodious laboratories placed at our disposal, for we are able to do more efficient work at a smaller expenditure of time and energy than in previous years. On account, however, of the growing importance of a practical knowledge of insect and plant life it is necessary that a building in the form of a greenhouse should be provided, so that the conditions can be controlled at all seasons. Continuous studies in plant physiology and in the life-histories of insects could then be carried out both by the students and by the staff in their research work.

We also need additional equipment for individual work in plant physiology and microscopy.

Further, a reference collection of accurately named insects belonging to the Coleoptera, Diptera, and Hymenoptera is sorely needed. The Gibson collection of Lepidoptera purchased last year fills a long felt want in that we have now a ready means of identification of insects belonging to this order.

REPORT FROM MR. T. D. JARVIS, LECTURER IN BIOLOGY.

At my request Mr. Jarvis has furnished me with the following notes regarding his work during the past year:

VISIT TO THE CORNELL UNIVERSITY. My holidays were spent at Cornell University, where I received instruction in systematic and economic ento-

mology from Prof. Comstock and Prof. Slingerland. I also studied parasitic fungi with Prof. Atkinson. While pursuing these studies I received many valuable hints and suggestions for future work.

FARMERS' EXCURSIONS. You directed me in the month of June to erect a tent on the College campus, where farmers might go for information on Biological problems. Collections of weeds, wild plants, weed seeds, and some of our common insects were exhibited and methods of eradication of weeds and the extermination of insects discussed. The Perennial Sow-thistle, Field Bindweed, Ox-eye Daisy, Couch Grass and White Cockle, some of the worst weeds in Ontario, were much discussed by the farmers. They were interested also in San José Scale, Apple-Borers, Codling Moth, Cucumber Beetles, Canker-worms, Tent Caterpillars, etc.

SPRAYING TO KILL WEEDS. For many seasons past demonstrations have been given throughout Ontario for the destruction of Wild Mustard. It has been proven that, under favorable conditions, spraying with Copper Sulphate will destroy this noxious weed. Farmers are now beginning to ask if the same treatment will serve for Sow Thistle, Bindweed, and other weeds. In order to answer these questions, a series of experiments was made early in July on weed patches in the vicinity of the College. Twenty-eight species of weeds, representing twelve botanical families of plants, were sprayed with Copper Sulphate, and the following results were obtained.

The weeds were sprayed with the usual strength of solution, nine pounds of Blue Stone to forty-five gallons of water. The records of results are those observed six hours after the spray had been applied, but it should be stated that even twenty-four hours after spraying the effects were no wise different from those observed six hours after spraying.

WEED SPRAYING.

Name of weed.	Effect of spray six hours after Spraying.			Remarks
	Effect on stem.	Effect on leaf.	Effect on flower.	
Wild Mustard	Much injured	80 per cent. killed	98 per cent. killed	Practically all destroyed.
Wormseed Mustard	Not injured	Slightly injured	Slightly injured	Only slightly affected.
Shepherd's Purse.....	Slightly injured	50 per cent. killed	10 per cent. killed	Root leaves destroyed. Stem leaves only slightly affected.
Dandelion	" "	70 " "	5 " "	Leaves fairly sensitive, flowers only slightly affected.
Annual Sow-Thistle ..	" "	50 " "	5 " "	Leaves fairly sensitive, flowers only slightly.
Burdock	" "	40 " "	No bloom.....	Leaves fairly sensitive.
Ox-eye Daisy	Flower stems drooping	10 " "	10 per cent. killed	Stems droop but revive again.
Chicory	Not injured.....	Not injured.....	10 " "	Only flowers affected.
Purple Fleabane	Slightly injured	15 per cent. killed	20 " "	Only slightly affected.
Bull Thistle	25 per cent. killed	75 " "	No bloom.....	Leaves very sensitive.
Canada Thistle.....	Slightly injured	50 " "	" "	Not so sensitive as Bull Thistle.
Spring Sow-Thistle	" "	50 " "	Slightly injured.....	Leaves fairly sensitive, flowers only slightly.
Yarrow.....	Not injured.....	25 " "	Not injured.....	Leaves slightly sensitive.
Blue Weed	25 per cent. killed	75 " "	60 per cent. killed	Leaves nearly as sensitive as Wild Mustard.
Stickweed	Slightly injured	50 " "	5 " "	Leaves fairly sensitive.
Hound's Tongue	Not injured.....	2 " "	2 " "	Only slightly affected.
Broad-leaved Plantain ..	"	Not injured.....	Not injured.....	Apparently uninjured.
Rib-Grass	"	5 per cent. killed	"	Only slightly injured.
Motherwort	"	8 " "	"	"
Catnip	"	Not injured.....	"	Apparently uninjured.
Black Medick	"	"	"	"
Field Bindweed	"	5 per cent. killed	100 per cent. killed	Flowers very sensitive.
Purslane	"	Not injured.....	Not injured.....	Apparently uninjured.
Couch Grass	"	10 per cent. killed	"	"
Wild Buckwheat.....	Slightly injured	10 " "	"	Only slightly affected.
Curled Dock	"	10 " "	20 per cent. killed	"
White Cockle.....	Not injured.....	25 " "	75 " "	Flowers fairly sensitive.
Round-leaf Mallow	"	Not injured.....	Not injured.....	Apparently uninjured.

Conclusions.

1. Wild Mustard is the only weed that can be readily destroyed by bluestone.

2. The flowers of Field Bindweed and White Cockle and the leaves of Blue Weed, Bull Thistle, Canada Thistle, and Sow Thistle are very sensitive to the spray, but further experiments will be necessary before this treatment can be recommended.

OUTSIDE WORK IN BIOLOGY. I have the honor of being President of the Wellington Field Naturalists' Club and Secretary of the Panton Club. The Wellington Field Naturalists' Club was organized about five years ago and the membership has increased very rapidly since that time. We meet fortnightly and many interesting meetings have been held during the past year. The migration habits and songs of birds, the time of flowering and habits of plants, and many insect problems have been discussed. The Panton Club is a scientific club formed at the College about three years ago. The members consist of students and officers of the College. Since the organization, many interesting scientific problems have been discussed. Among such are: "Mendel's Law of Plant Breeding," "The Life and Work of Charles Darwin and Thomas Huxley," "Evolution of Languages," "History of Childhood," "The Spectroscope," "Evolution of Plant and Animal Life," "Climatic Conditions of Ontario," etc.

III. INSECTS AND FUNGUS DISEASES.

INSECTS IN 1904. As I have already stated, much of the correspondence of this department had reference to the depredations of insects and fungi. My report to the Entomological Society (see Report for 1904) on the "Injurious Insects of the Year" contains brief mention of the chief insects which were injurious to farm, orchard, and garden crops. Briefly, however, I may say that 1903 and 1904 have been "off-years" with insects, and the extent of their depredations have been below normal. Another noteworthy feature of these years has been the introduction of improved spraying machinery and better methods of spraying orchards. Power sprayers are now quite commonly used in the fruit regions, with the result that more thorough and more systematic work is being done. Also, better provision is now made for the preparation of the solutions and washes used in spraying.

FUNGI AND FUNGUS DISEASES. Few persons perhaps fully realize the amount of damage done by parasitic fungi to the crops of the Province. When we consider the damage done to our wheat and oat crops by rust and smut, to the apple crop by apple scab, to the peach crop by the peach-leaf curl, to the potato crop by the late blight, and to the grape crop by the mildews and Black Rot, some idea at least is gained of the large losses every year, and we are strongly convinced that greater damage is done by fungus diseases than by insects.

On account of their peculiar habits, however, fungus diseases are not well understood by the ordinary layman, and sometimes methods of treatment are adopted which are not at all remedial in their action. Sometimes, too, the growers of plants wrongly assume that every plant which is diseased has been attacked by a parasitic fungus of some kind, and can be treated by sprays. On the other hand we know that diseased conditions are often set up in plants by unfavorable and unsuitable surroundings, such as soil, atmosphere, light, and temperature.

On account of the importance of the subject of Plant Diseases and the large number of inquiries for information received every year by this department, it was thought that a concise account of the habits of parasitic fungi in general, and a few *keys* for the identification of the diseases affecting apple, peach, brambles, groselles, and the grape, would at this stage be timely, and would also be appreciated by the readers of this Report.

WHAT IS A "FUNGUS"? A fungus is a plant, but it differs from the common green flowering plants in the following particulars: It lives on organic matter already prepared by its host; it has no green coloring matter (chlorophyll); it has no system of vessels; and it reproduces by spores and not by seeds. The body of a fungus consists of a *vegetative* or *nutritive* portion, always in close contact with its source of food supply, and a *reproductive* portion, dependent upon and attached to the vegetative portion. The vegetative portion is composed of a number of usually colorless, branching, thread-like tubes, which serve the same function as both root and stem of the higher plants. The presence of such fungal threads in any tissue disturbs the normal functions of that tissue, so that sooner or later a diseased condition is set up, followed either by the death of the cells or by abnormal swellings and distortions of the area affected. The fungus has grown rapidly at the expense of the food which should have been appropriated by the host plant. In some cases the fungus lives on the surface of its host, as in the case with the Powdery Mildews, and sends down into the cells within sucker-like branches by means of which it obtains the food necessary for rapid growth and development.

The reproductive bodies are *spores*, and are usually formed in large numbers. They are very minute, and can be readily carried in the currents of air for considerable distances. The spores are very variable in shape and size, but those belonging to any particular species are wonderfully alike. There are, speaking roughly, two kinds of spores,—the summer spores, produced during the summer, with thin walls, and capable of germinating under suitable conditions in a few days, and the winter spores produced in fall or in winter, thick-walled, and usually requiring a period of rest before germination. Frequently a fungus forms both summer and winter spores, and as these are usually quite unlike in appearance and in habit, botanists have frequently described different stages of the same fungus as two distinct species. Such mistakes have occurred with Apple Scab, Brown Rot, Bitter Rot, and several other forms.

Another peculiarity of some of these fungi with both summer and winter spores is that while they are passing through the summer stage they are serious parasites, i.e., they feed on living tissue, whereas they are *saprophytes* (feeding on decaying vegetable matter) during their winter spore stage.

A fungus gains an entrance to its host through the germination of the spores, and the growth of *germ-tubes*. As spores germinate only in the presence of moisture it is to be expected that moist weather with little sunshine is conducive to fungous infection and growth. Sometimes the germ tube enters the leaf through a breathing-pore or stomate; sometimes it secretes an enzyme which dissolves the cell-wall, and thus effects an entrance; and sometimes the spore alights on an open wound, or in a crack and thus finds an easy entrance. It is hard to explain why only certain fungi can infect and attack certain host plants, or in other words, why every plant has its own peculiar fungus.

CONTROL OF FUNGI. From a study of the habits of parasitic fungi, we are able to indicate the best lines of treatment. These may all be included in the term *prevention*. A few of these preventive measures will be mentioned here: (1) The application of fungicides which either kill the spores

adhering to the plant or prevent them from germinating. To be effective the fungicide must be applied in a *thorough* manner and at the *proper* time. As a rule early spraying should be done to prevent germination of winter spores which are blown to the stems and leaves in early spring. Late sprayings must also be applied to kill the summer spores which have blown over from neglected plants, or have developed from winter spores which have germinated in spite of the treatment. The best general fungicide is Bordeaux Mixture, the preparation of which is well-known.

(2) *Pruning* is very effective in controlling such diseases as Black Knot, Apple Tree Canker, and Pear Blight, if all of the diseased wood is removed and burned.

(3) *Good, Clean Seed*, free from spores or disease is essential to the production of healthy plants. Smut in oats, wheat, and barley, and scab in potatoes can be prevented by attention to this point.

(4) *Cleanliness* about the garden, orchard, and farm in the matter of burning the fallen leaves and the destruction of diseased fruit is a very important factor in controlling disease, when we remember that many of the spores winter over in the fallen leaves and fruit.

Parasitic fungi injure their hosts by *appropriating* their food, thereby impairing their vigor, by *disorganizing* and *killing* tissues which contribute to the proper functioning of the plant or by *stimulating* the affected tissues to an abnormal growth called an *hypertrophy*.

SOME ABNORMAL GROWTHS AND THEIR CAUSES. (1) *Corky Growths*, as in scab of potato, characterised by the development of large amounts of cork. Causes not clear, but may be fungi, bacteria, absence of lime, or dampness of soil.

(2) *Cankers*, characterized by open wounds in spite of attempts at healing. May be due to several causes: (a) *fungi* such as *Nectria*, *Glomerella*, and *Sphaeropsis*, (b) bacteria, (c) insects, such as Woolly Aphis, and Chermes.

(3) *Witches' Brooms*, characterized by irregular clusters of twigs at certain affected points. They are due to fungi, such as *Exoascus* and *Aecidium*.

(4) *Root Nodules*, irregular growths on root or at crown of root, may be due to one of several causes; (a) *Slime fungi*, as in Club Root of Cabbage. (b) true fungi, (c) bacteria, (d) insects, and (e) nematodes.

(5) *Erinoid Growths*, hair-like growths on leaves of poplar, oak, basswood, are due to the action of mites.

(6) *Galls* are enlargements due to the puncturing of young tissues by mites and insects, such as *Phytoptus*, *Aphides*, *Cynipids*, and *Cecidomyiids*.

SOME DEFORMATIONS AND DWARFING AND THEIR CAUSES. (1) *Unequal Growth* on stems or leaves are due to fungi, aphids, or mites.

(2) *Dwarfing of a plant* may be due to lack of food materials, to insects or to fungi.

(3) *Leaf-Rolling* is due to insects or mites.

WILTING AND ROTTING AND THEIR CAUSES. (1) Damping-off of Seedlings is due to a fungus (*Pythium*).

(2) *Rot* of fruits is due to various fungi, such as *Monilia*, *Laestadia*, *Botrytis*, *Mucor*, *Penicillium*, bacteria, etc.

(3) *Oedema* or *Dropsy* is due to excess of water.

ABNORMAL COLORATION OR SPOTTING AND ITS CAUSES. (1) *General Pallor* indicating a disturbance of the chlorophyll tissue, may be due to one or more of several causes: (a) Fungus attacks on roots, (b) insect attacks on

roots, (c) insufficient or too intense light, (d) too low or too high temperature, (e) too much or too little water in the soil, (f) lack of iron and other essential food materials in the soil.

(2) *White or Grey Spots* are due to Mildew, Septoria, &c., Cystopus, and red spider.

(3) *Yellow or Orange Spots* to rusts, aphids and red spiders.

(4) *Red Spots* to certain stages of Rusts.

(5) *Brown Spots* to blights, leaf spots, mildew and rusts, often a stage of disorganization of affected tissue.

(6) *Black Spots* to apple scab, pycnidial, and ascus stages of many sac-fungi, rusts, smuts, &c.

(7) *Brown Spots with Red Margins* to many anthracnoses and strawberry leaf-blight.

A KEY TO THE FUNGUS DISEASES OF THE APPLE.

A. *The Roots*:—

(a) Enlargements near the ground, mainly on nursery stock. Crown Gall (*Dendrophagus globosus*).

B. *Stems and Twigs*:—

(a) Irregular or somewhat concentric open wounds, the bark being first destroyed. *Apple Tree Cankers* (*Nectria ditissima*), (*Sphaeropsis malorum*) and (*Glomerella rufomaculans*).

(b) Bark becomes black or dark brown; the inner bark and cambium layer destroyed. Tree has appearance of being scorched. *Twig Blight* (*Bacillus amylovorus*).

C. *Leaves*:—

(a) Small, roundish, smoky greenish spots appear on upper surface which soon run together, forming irregular, blackish blotches. *Apple Scab* (*Fusicladium dendriticum*) (*Venturia inaequalis*).

(b) White patches appear on both surfaces of young leaves and run together, forming a white felt. *Powdery Mildew* (*Podosphaera oxyacanthae*).

(c) Leaves become blistered with orange-yellow spots on upper surface and scurfy bunches on the lower. Leaves may become distorted. *Apple Rust* (*Gymnosporangium macropus*).

D. *Fruit*:—

(a) Minute spots appear on half grown apple, gradually enlarging, and running together, forming irregular patches. Black points often in concentric circles form on the patches. *Ripe or Bitter Rot* (*Gloeosporium fructigenum*) (*Glomerella ruformaculans*).

(b) Scabby patches appear on the fruit. *Apple Scab* (*Fusicladium dendriticum*) (*Venturia inaequalis*).

(c) Sooty patches accompanied by specks appear on the fruit. *Sooty or Fly-speck Fungus* (*Leptothyrium pomi*).

A KEY TO THE FUNGUS DISEASES OF THE PEACH.

A. *The Roots*:—

(a) Soft corky enlargements usually at the crown of the Root, causing the death of the trees before they have attained full growth. *Crown Gall* (*Dendrophagus globosus*, Toumey).

B. *The Stem and Branches*:—

(a) The buds unfold prematurely and the new shoots become slender, sickly, and yellow. *The Yellows*.

- (b) The buds form compact tufts or rosettes, containing one or two hundred leaves, which are yellowish green. *The Rosette*.
- (c) A copious outflow of gum upon the twigs and branches usually form spots near the buds. *Gummosis or Gum Flow*.
- (d) New Shoots become thickened and enlarged. *Leaf-Curl* (*Exoascus deformans*).

C. *The Leaves* :—

- (a) In May and June the leaves curl up, become deformed, much thickened and pale yellowish green, then rosy or purplish in color—affected trees lose their leaves before mid-summer. *Leaf-Curl* (*Exoascus deformans*).
- (b) Numerous minute brown spots on the under surface of the leaves, which fall early. *Peach Rust* (*Puccinia pruni-spinosae*).
- (c) Minute purplish spots appear; later the tissue dies, and minute holes like shot-holes appear in the leaf. *Shot-Hole Fungus* (*Cylindrosporium padi*).
- (d) A white mildew appears on the leaves. *Rose Mildew* (*Sphaerotheca pannosa*).
- (e) White mould-like growth, causing the leaves to become hard and curled. *Peach Mildew* (*Podosphaera oxysanthæ*).

D. *The Fruit* :—

- (a) Scattered tufts of a brownish mould first appear, followed by a soft rot. Later the fruit dries and may remain on tree over winter as a "mummy." *Brown Rot* (*Monilia fructigena*, *Sclerotinia fructigena*).
- (b) Sooty-black spots or patches on the fruit, often accompanied with cracks. *Peach Scab* (*Cladosporium carpophilum*).
- (c) Minute light brown velvety spots with a reddish border, frequently resembling minute pustules. *Brown or Pustular Spot* (*Helminthosporium carpophilum*).
- (d) Large light-colored spots with formation of many surface hairs or fuzz. Under these spots the flesh becomes hard. *Rose Mildew* (*Sphaerotheca pannosa*).
- (e) Irregular, mouldy patches on the surface followed by a cracking of the fruit. *Peach Mildew* (*Podosphaera oxysanthæ*).

A KEY TO THE FUNGUS DISEASES OF BRAMBLES.

A. *The Leaves* :—

- (a) Orange-red patches on the under surface of the leaves, forming a sort of waxy layer of orange-red spores. *Orange Rust* (*Cæoma nitens*, *Puccinia Peckiana*).
- (b) Light-colored, powder-like coarse dust or raised black dots on the under surface. *Leaf-Rusts* (*Phragmidium rubi* and *P. Rubidæi*).
- (c) At first small reddish spots increasing in size and forming irregular areas, grey in centre and red on the margin. *Anthracnose* (*Gloeosporium venetum*).
- (d) Small brown or light-colored spots. *Leaf Spots* (*Septoria rubi* and *Cylindrosporium rubi*).

B. *The Stem* :—

- (a) At first small reddish spots on young canes, increasing in size forming irregular areas, grey in centre, red on the margin. *Anthracnose* (*Gloeosporium venetum*).

- (b) The canes suddenly wilt about fruit ripening time, the bark and wood of cane at some points are discolored. *Cane-Blight* (*Coniothyrium rubi*).
- (c) Stunted growth, mottled yellowish-green foliage and dry insipid fruit. *Yellows*.
- (d) Rough, warty knots on canes, with small whitish eruptions surrounding the central knot, not common. *Cane Knot*.

C. *The Roots* :—

- (a) Rough, knotty growth on the roots, granular and becoming dark when old. *Crown Gall* (*Dendrophagus globosus*).

A KEY TO THE FUNGUS OF THE GROSELLES.

A. *Leaves* :—

- (a) Cobweb-like patches first appear, later minute dark brown bodies on the leaves of Gooseberry—usually worst on English varieties. *Gooseberry Mildew* (*Sphærotheca morsuvæ*).
- (b) Dull brown spots appear in June and July on the upper surface of the leaves which turn yellow and fall. *Anthracnose* (*Gloeosporium ribis*).
- (c) The leaves have a brown spotted appearance and fall prematurely. *Leaf-Spot* (*Septoria ribis*).
- (d) The presence of yellow "cluster-cups" on the leaves, *Gooseberry Cluster-Cup* (*Aecidium grossulariæ*).

B. *Canes and Shoots* :—

- (a) The tender tips of young shoots of Gooseberry covered with cobweb-like patches. *Gooseberry Mildew* (*Sphærothecæ morsuvæ*).
- (b) Leaves of Currant wilt, color, and fall; fruit cluster shrivel and fall; the canes die rapidly. Pink tubercles of a fungus appear on dead canes. *Currant Tubercle* (*Tubercularia vulgaris*) Conidial stage of *Nectria cinnabarina*.

C. *Fruit* :—

- (a) Cobweb-like patches occur on the fruit of gooseberry. *Mildew* (*Sphaerotheca morsuvæ*).
- (b) Yellow blisters (Cluster-cups). *Gooseberry Cluster-cup* (*Aecidium grossulariæ*).

A KEY TO THE FUNGUS DISEASES OF THE GRAPE.

A. *Leaves* :—

- (a) Pale green or yellowish spots on upper surface, and corresponding areas on lower surface covered with a delicate white mildew. The spots increase, become brown, and the leaf falls. *Downy Mildew* (*Plasmopara viticola*).
- (b) White or greyish-white patches appear on the upper surface of the leaves, later they present a powdery appearance. *Powdery Mildew* (*Uncinula spiralis*).
- (c) Small brownish patches appear on the leaves, on which are situated minute black points. *Black Rot* (*Laestadia bidwellii*).
- (b) Small irregularly scattered, greyish spots bordered by a dark line: the central portion of the spots becoming dry, brown, and brittle. *Anthracnose* (*Gloeosporium ampelophagum*).

B. *Buds and Shoots* :—

- (a) Circular and irregular spots on the shoots. *Black Rot* (*Laestadia bidwellii*).

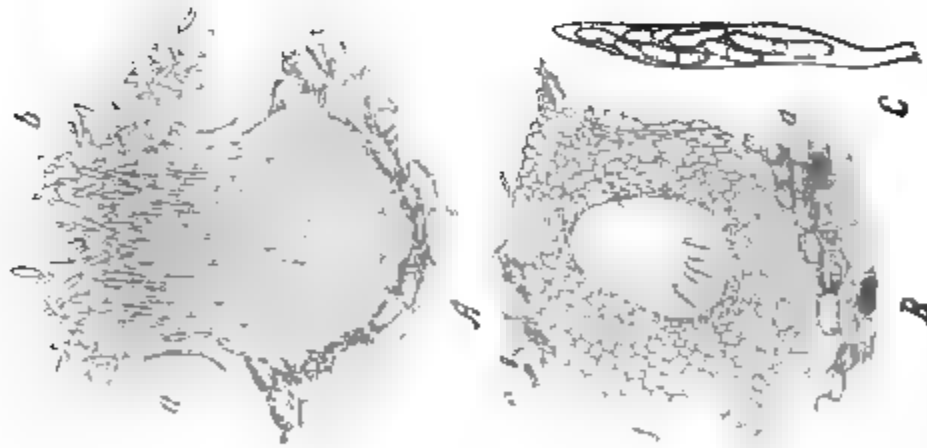


FIG. 2.—Microscopic structure of the bitter rot fungus. A, section through the affected part of an apple. The mycelium of the fungus has formed a mass of spore-bearing stalks (*coniophores*) which have ruptured the epidermis of the fruit and formed a pustule from which numerous summer spores (*conidia*) are being given off; a, cuticle of apple; b, spores. B, section of an old affected apple showing the perithecia in which is seated the thick walled spore case (*perithecia*). f, in which young spore sacs (*asci*) are forming; e, mycelial threads among which are scattered some two-celled spores (*conidia*). C, a mature spore sac (*ascus*) containing eight spores (*ascospores*). All highly magnified. (D, E, after Burrill, the others after Longyear.)



Fig. 1.—Nectria Canker.

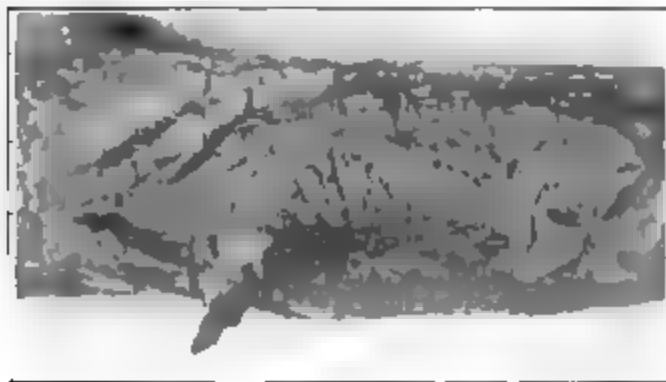


Fig. 3.—Bitter Rot Canker
(After Burrill.)

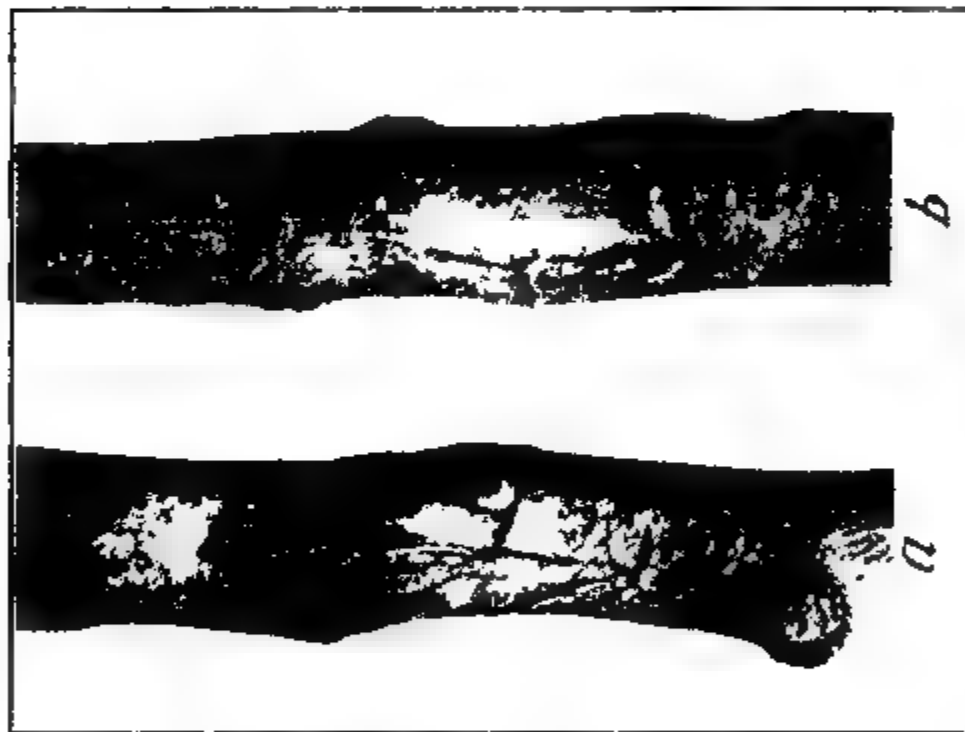


Fig. 4.—Two young trees showing cankers due to the
black rot fungus, and produced by artificial inoculation
by Paddock a, pear ; b, apple.



Fig. 5.—Microscopic structure of the black rot fungus. A, section from a wintered specimen of crab apple showing a the dark colored mycelial threads among the cells; the fruit, b d a thick walled spore case (pycnidium) which has pushed through the epidermis, e, and is giving off dark colored spores, e, through the protruding mouth; B, mature spores germinating in water and giving rise to germ tubes, f. All highly magnified.
(After Longyear.)

C. Fruit:—

- (a) Small brown or black spots appear on the berry, which soon become black, shrivelled, and hard, and studded with minute black points. *Black Rot* (*Laestadia bidwellii*).
- (b) Irregular blotches occur, having a bright red ring inside the blackish border—sunken areas result. *Anthracnose* (*Glœosporium ampelophagum*).
- (c) Irregular patches occur, pustules sometimes appear in concentric circles. *Bitter Rot* (*Glœosporium fructigenum*).
- (d) A brown rot of the berries produced by a *downy mildew*. (*Plasmopara viticola*.)

D. Root:—

- (a) Enlargements formed at or near the surface of the crown. *Crown Gall*.

APPLE TREE CANKERS.

In recent years considerable attention has been given to those appearances on apple trees commonly designated as *Cankers*, on account of the fact that but few orchards in the Province can be said to be free of them. Some of the best apple trees in many orchards have succumbed to the attacks of the canker, and the owners are already inquiring anxiously for information regarding the nature of this disease and the best methods of combatting it.

As a result of the observations and investigations carried on during the last few years it can be now definitely stated that there are several kinds of canker, each possessing its own peculiar characters, and each induced by a different cause.

Cankers are wounds kept open by the action of some agency in spite of the attempts of the tissues to heal them. As a rule, they are conspicuous, whenever they are present, either by the absence of bark, or by the abnormal roughness of the bark clinging closely to the adjacent tissues, or by a large mass of dead and disorganized wood.

Cankers may be grouped and discussed according to the agencies causing them:—1. Sun-scald and Sun-burn Canker; 2. Frost Canker; 3. Nectria Canker; 4. Bitter-Rot Canker; 5. Black-Rot Canker; 6. Woolly-Aphis Canker.

SUN-SCALD AND FROST CANKER.

Such a canker is nearly always observed on the south or south-west side of the tree. During warm days in winter the tissues on the sunny side of the trunk are warmed up and are incited to renewed activity. Such tissues always suffer from subsequent freezing, by the loss of water from the cells. Afterwards they contract and crack open. Similar effects are produced by the action of very dry, cold winds, which cause the tissues to lose much water.

The tissues destroyed in these ways become disorganized; the bark falls away from the wood, and saprophytic fungi effect an entrance before the wounds can be closed up by the rapid growth of the healthy tissue bordering on the wound.

NECTRIA CANKER.

This canker, which is the common one in orchards in Europe, has been identified for a certainty in but few localities in Canada and the United

States. It is probable that it is in our Ontario orchards as it has been observed in the New York State and Nova Scotia. (Fig. 1.)

Massee describes this canker as being "a wound-parasite, its spores germinating in the first instance on some wounded surface, and from thence invading the healthy tissues. The bark is first attacked and destroyed, often cracking in a concentric manner; afterwards the wood is also destroyed, the canker often completely girdling small branches. As a rule a thickened, irregular margin of living bark forms round the wound, giving a ragged appearance to the parts attacked, and very characteristic of the disease." Spores (conidia) are borne in autumn on minute, white cushions on the wound, and in spring ascospores are produced in small red perithecia, situated on the same cushions.

BITTER-ROT CANKER.

This canker is very common in the orchards of Illinois and other central States. The relationship of this canker to the Bitter-Rot was discovered in 1902, when it was determined that the winter stage was passed on the cankers formed on the branches and often at the base of the old fruit-spurs. It was also proven that the main source of infection of the fruit was this winter and permanent stage of the disease in the canker.

This canker is most usually found on small branches, and starts from a bruise on the bark. "Growth takes place around the diseased area as it does about any wound, and there is formed an irregular encircling rim of healing tissue about a dead and depressed, or sunken, usually elongated, black patch, covered with dead bark." (Figs. 2 and 3.)

BLACK ROT CANKER.

The Black Rot of apples is more or less common and well-known, but it is not so well-known that this same fungus produces cankers on the limbs of apple trees. The bark of affected areas first becomes discolored, then it becomes roughened and thickened. Sometimes the dead bark comes off, but usually the limb is girdled completely, and killed. Infection takes place in spring through wounds, and the affected "areas extend slowly as the fungus grows outward in all directions till midsummer, when a definite boundary forms between the dead and living bark." It is believed that sun-scald renders some varieties very susceptible to this canker. (Figs. 4 and 5.)

In all cases of canker the smaller limbs should be removed and the large ones scraped and painted to prevent re-infection. Diseased fruit containing the summer stages should be buried or burned. Winter applications of white-wash, and summer applications of Bordeaux Mixture will be of great service in controlling these serious enemies of the orchard. Steps should be taken also to protect the south-west sides of the trunks from sun-scald injury, and to prevent careless bruising or abrasion of the bark.

Realizing the importance of the Canker as a disease in our orchards, this Department will devote some time during the coming year to a further study of the different kinds of canker in order to determine the most effective method of controlling and preventing the ravages of the disease.

Respectfully submitted,

W. LOCHHEAD.

PART V.

THE PROFESSOR OF CHEMISTRY.

To the President of the Ontario Agricultural College :

SIR,—I beg to submit herewith my fourth Annual Report.

The work undertaken in this department naturally falls under three headings:—Teaching, Miscellaneous Work, including correspondence, addressing meetings, examining chemically a great variety of substances sent to the laboratory for that purpose, etc., and Investigation Work. As this is primarily a teaching institution, the instruction given to students in attendance in the regular college classes, and to those in the various short courses, is the most important part of our work, and naturally consumes the greater part of our time and energies. The work of answering letters of inquiry on practical points, examining miscellaneous substances, attending and addressing meetings of various kinds is important work and is increasing each year. We are also from year to year more frequently called upon to make chemical analysis to complete investigation work being done in other departments. The duties enumerated make it very difficult for us to undertake and successfully carry out any extended lines of investigation. There are three lines of work I am particularly anxious to see developed, namely: (1) investigation regarding the composition and digestibility of cattle foods; (2) development of the problems of Soil Chemistry and the most rational methods of Manuring for the many crops of the farm, and (3) the rendering of all possible aid in the solution of many difficult and intricate questions relating to the Dairy Industry. I am glad to be able to report that some work has been done along these lines. My Associate, Mr. Gamble, has already prepared and submitted for publication a bulletin on the composition of the various by-products from the flour, oat, pea, and starch mills of the Province. We have analysed some 35 samples of swamp soils, and I intend to continue the study of this class of soils by means of co-operative experiments during the coming season. Some work has also been accomplished in connection with the dairy industry. There are several other lines of investigation, as, for instance, problems in connection with the canning industry, chemical nature of insecticides and fungicides, wheat flour and baking, etc., etc., which we should take up more fully than we have in the past, but more assistance is required to do analyses before we can hope to make research a strong branch of our work.

I desire to thank you for allowing me some extra assistance during the year, and wish to acknowledge the hearty co-operation of all those associated with me in the work of this department.

TEACHING.

The nature of the work we are endeavoring to accomplish in the way of instruction to students is fairly well outlined in the College circular, and in my report of last year, and requires no extended notice here. In addition to the work of previous years, we have, however, had class work with the Junior and Senior Normal Classes in Domestic Science. The junior class take inorganic chemistry with our first year men, and the senior class are being given lectures and laboratory work in the chemistry of foods. The work in this subject consists of a brief study of the various

classes of oxygen derivations of hydrocarbons of the Marsh gas series in order that the relationship between the alcohols, aldehydes, acids, and etherial salts, and the properties of these classes of compounds, may be understood; a study of the food principle, as, for instance, the fats, carbohydrates, proteids, etc., and their functions when used as food, followed by a thorough discussion of the different groups of foods, fruits, condiments, etc., their characteristic composition and digestibility, common adulterations, etc., etc.

In addition to the instruction given to the regular college classes, lectures and laboratory work was given to the students taking short courses in Dairying, Poultry, and Stock Judging; to the instructors employed by the Western Dairymen's Association; and to a number of men who came in for special instruction throughout the year. Directing the work of men making chemical investigations in connection with these also absorbs considerable time.

MISCELLANEOUS WORK.

As the College and the work it is seeking to do become better known, letters asking for general and definite information along a great variety of lines, are received in increasing numbers. Many of these letters are accompanied by samples of various substances sent to us for analysis, identification, detection of adulterants, etc. I am desirous of making the work of the department as useful as possible to the farmers of the country and, therefore, anxious to comply with the request of all correspondents; but, unfortunately, time will not permit us to undertake all the work of this nature that is asked of us.

During the year I attended and delivered addresses at a number of conventions, among which were the Canadian Master Bakers' Association, Fruit Growers' Convention, and Butter Makers' convention. I also gave three lectures to the students of the Strathroy Dairy School, and attended the conference in Ottawa at which the Canadian Seed Growers' Association was formed.

A number of articles have been contributed to the press on various subjects relating to agriculture, and a special report as referee on "Vegetable Proteids" in connection with the work of the Official Agricultural Chemists' Association of America was prepared. Some special work was also done at the request of this Association, in co-operation with other chemists of the Continent, in testing methods for determining "quality" in wheat and flour, a report of which was made to the Association. At the request of the Executive Committee, I have consented to act as referee on the separation of "Milk and Cheese Proteids" for this coming year. This will entail a considerable amount of work, but we are in need of more definite information along these lines in order to carry on the investigation work we would like in connection with the Dairy Industry.

INVESTIGATION WORK.

TESTS OF DIFFERENT VARIETIES OF SUGAR BEETS.

For four years we have determined the percentage of sugar in all the varieties of sugar beets grown on the Experimental Plots at the College. Some of these varieties are of the large growing kinds commonly used for feeding cattle; other varieties are those grown for sugar factory purposes,

the seed being imported from some of the best known German seed dealers. The beets were grown on the level in rows 21 inches apart and thinned so as to leave the plants 8 inches apart in the row. The object of the experiment is to show the difference in the sugar content of the sugar factory varieties and those grown for feeding, and to compare some of the newer German varieties with the Kleinwanzlebener, the one now commonly used in this country.

PERCENTAGE OF SUGAR AND PURITY OF JUICE OF BEETS GROWN ON EXPERIMENTAL PLOTS.

Name.	Average weight of beets.	1904.		Average of four years.	
		Sugar.	Purity.	Sugar.	Purity.
	lb. ozs.				
New Danish Improved....	1 0.9	10.7	79.8	11.1	81.5
Red Top.....	1 8.5	9.6	82.7	10.7	83.2
Royal Giant.....	1 10.4	9.5	77.5	10.1	82.0
Giant Rose Feeding.....	1 8.4	8.8	74.5	13.4	84.7
Giant White Feeding.....	1 9.4	9.1	76.8	9.3	77.0
White Silesian.....	0 11.6	13.4	82.6	14.2	83.4
Red Skinned.....	1 2.4	11.4	85.0	12.7	83.6
White French.....	0 13.2	14.0	83.0	12.3	82.9
Carter's Nursery.....	0 9.7	16.8	84.5	13.4	83.4
Green Top White.....	0 13.7	18.1	83.6	13.4	84.3
Lane's Improved.....	0 10.2	14.4	85.4	13.0	83.9
Champion.....	0 12.6	16.5	82.2	15.4	84.1
Queen of the Danes.....	0 14.7	12.0	79.6	11.7	82.0
Kleinwanzlebener.....	0 12.0	16.4	84.2	16.9	88.1
Jersey.....	0 11.3	11.7	86.9	12.9	86.6
Imperial Grey Top.....	0 12.0	16.7	86.7	15.6	86.7
French Yellow.....	0 10.2	12.7	82.1	13.0	83.6
Pitzscheke Elite.....	0 11.4	17.1	86.9	16.4	89.0
Improved Imperial.....	1 0.3	17.4	90.3	16.8	89.4
Vilmorin's French Sugar...	0 8.4	15.5	86.7	15.6	86.7
Average of three years					
Ideal.....	1 5.4	8.0	72.2	7.6	70.9
Mangel Sugar Beet.....	0 12.6	18.5	83.8	17.1	86.1
Tankard Cream.....	1 5.1	8.3	72.3	9.0	76.6
Jaensch's Victrix.....	0 9.9	17.5	89.0	17.0	88.6
Rubensamen (Rimpan).....	0 14.2	17.9	89.2	17.6	89.5
Diechman, No. 1.....	0 14.4	17.0	85.6	16.8	86.2
Diechman, No. 2.....	0 12.1	17.3	83.5	17.1	87.5
Diechman, No. 3.....	0 8.9	16.4	81.5	16.7	86.4
Average of two years.					
Rennie's Giant Sugar.....	1 0.3	11.4	81.0	11.1	80.1
Hybrid Sugar Beet.....	1 2.3	11.8	80.4	11.5	80.2
Mangel.....	1 0.6	10.3	79.7	10.8	79.3

It will be noticed that the large growing, heavy yielding varieties, such as the New Danish, Ideal, Giant Half Sugar, Rennie's Giant Sugar, etc., are low in sugar and in the percentage of the solids made up of sugar. The average percentage of sugar in the Kleinwanzlebener is 16.9 with a purity of 88.1. Several other varieties have given equally good results. Rubensamen, as the results of three year's experimental work, gives the best average results, 17.6 per cent. of sugar and 89.5 per cent. purity. These results should be studied in connection with the yields which are given in Bulletin No. 140, prepared by the Experimentalist.

TEST OF QUALITY OF SUGAR BEETS AS AFFECTED BY THE DISTANCE BETWEEN THE ROWS.

This experiment has been carried out for three years in succession. The beets have been grown by the Experimental Department in plots seven rows wide by four rods long, and on soil in uniform condition. The seed was sown on the level in rows 12, 14, 16, 18, 20, 22, 24, 26, 28, and 30 inches apart, and, in all cases, thinned so as to leave a plant every eight inches. The experiment was conducted in duplicate each year, and two sets of samples were selected from each plot. The object of the experiment was to determine what effect sowing beet seed in rows various distances apart has on the yield and quality of the beets.

COMPOSITION OF THE JUICE OF SUGAR BEETS GROWN IN ROWS DIFFERENT DISTANCES APART.

Space between rows in inches.	Average weight of tared beets.	1904.			Average weight of tared beets.	Average Results of Three Years' Analysis.		
		Analysis of Juice.				Solids.	Sugar.	Purity.
		Solids.	Sugar.	Purity.				
	oz.				oz.			
12	9.5	19.5	17.3	88.7	9.6	18.9	16.7	87.9
14	9.8	19.3	17.5	90.9	10.6	18.7	16.6	88.6
16	9.6	19.9	17.6	88.2	11.8	19.1	16.7	88.8
18	10.0	20.3	17.7	87.0	11.6	19.0	16.7	87.9
20	11.3	19.9	17.8	89.3	12.4	18.9	16.9	89.2
22	13.3	19.4	17.8	91.7	14.3	18.6	16.5	88.8
24	11.8	19.9	17.9	89.2	14.8	18.8	16.5	87.8
26	12.9	19.5	17.5	89.8	14.9	18.7	16.4	87.4
28	15.9	19.4	16.8	86.6	15.4	18.5	16.3	86.5
30	16.8	19.7	17.4	88.9				

In every instance when beets were collected for analysis, samples were taken from all the plots the same day in order that uniformity of weather conditions might be preserved. Both this year's experiment and the average of the three years, shows there is a regular increase in the weight of the tared beets as the space between the rows is increased. There is, however, no corresponding falling off in quality. The percentage of sugar and purity do increase slightly up to where the rows are 20 inches apart and fall off somewhat from that point, especially in the purity column, but the decrease is not very great. Reference to the table giving yield of beets from the different plots which may be found in Prof. Zavitz's report, shows that there is a decided decreased yield as the space between the rows is increased. These results indicate that the best quality of beets will be got when they are grown in rows 18 or 20 inches apart, and that when the distance between the rows is increased there is a slight falling off in quality and a marked decrease in the yield. With the implements now at the disposal of the sugar beet grower, it is possible to conveniently cultivate between rows 18 or 20 inches apart. This is the spacing usually recommended by those interested in the production of beets for sugar factory purposes, and apparently the proper distance apart to give the best returns to the grower.

THE SUGAR BEET INDUSTRY.

During the past summer, the Dresden Sugar Co., removed their factory from Dresden to the State of Wisconsin, and the Wiarton Beet Sugar Manufacturing Co., suspended operations. As the Peterboro' people never completed their factory, there are only two factories manufacturing sugar from sugar beets in Ontario this season. Neither of these factories will receive sufficient beets to make a full campaign, but both companies express themselves as being satisfied with the prospect. Dr. Shuttleworth, of the Ontario Sugar Co., Berlin, writes on Dec. 15, 1904, as follows: "Our campaign, I think, can be considered as successful as might be expected for the third year. Farmers are apparently well satisfied. The pulp is in great demand, 4,000 team loads have been already hauled away and very nearly 200 carloads. The total tonnage will very nearly reach what we expected, and the sugar produced has been entirely satisfactory. The prices have been good, and almost the entire output ordered at regular prices as fast or faster than it was produced. We will, therefore, close our campaign with empty beet sheds, and entirely empty warehouse, and with a silo almost emptied of pulp. Better than all, the contracts for next year are coming in unsolicited much faster than last year."

In the month of July, I spent two days visiting the sugar beet fields in the Berlin district. They presented a decidedly improved appearance over that of the two previous years, and while some of the growers were not very enthusiastic over the prospects, the majority were proud of their sugar beet fields, and stated that they considered the crop one of the best, if not the best paying crop they had on their farm. Further, many of them did not hesitate to state that they did not consider sugar beets hard on the land, that it was a good cleaning crop, and that they thought it as good as a summer fallow for preparing the land for the other crops of the farm. The appearance of the crops on ground on which beets had been grown the previous year fully justified the statement. They also stated that, while there is a great deal of labor entailed in raising a good crop of sugar beets, it is not nearly so great as they had at first thought.

WHEAT AND FLOUR.

The opinion has been gradually gaining credence with the farmers in the Northwest Territories that the grain buyers were making too much difference in the prices paid for the different grades of wheat, that is, not enough was paid for the lower grades as compared with the higher grades. Early in the spring the Government of the Northwest Territories, through their Department of Agriculture, asked me to undertake work to show the real value of the various grades of wheat. After consulting you, I decided to undertake the work and wrote asking them to send me eight bushel lots of the various grades. I stipulated that each set of samples should consist of eight bushels, must be collected from one neighborhood, from one kind of soil, and that the wheat be graded by a competent man. This request was granted. All the wheat was grown on heavy loam or clay soils near Indian Head, and the grading was done by Mr. David Horn, Chief Grain Inspector, Winnipeg. The sacks were then labelled, and a seal placed on each. The wheat arrived in good condition with unbroken seals, and was immediately ground by Mr. E. J. Presant, miller, Guelph. Care was exercised to prevent the mixing of the various lots in the grinding process, and to insure the whole of the products being secured. The following table gives the weight of the wheat ground and of the products recovered:

It will be noticed that the total weight recovered is less than the weight of the wheat used. In explanation of this, I may say that the miller assured me that they lose in one way and another about two pounds on every bushel of wheat ground. The losses in this case correspond very closely with this estimate. The percentage of flour recovered is figured on the basis of the weight of wheat taken, not on the weight of cleaned wheat. Ten per cent. of low grade flour was removed from the portion saved for the baking tests and for analysis. The results of the analysis of the wheat and flour are given in the following tables:

TABLE I. SHOWING MILLING QUALITIES OF THE DIFFERENT GRADES OF WHEAT.

Lot.	Grade.	Total weight of wheat.	Total weight of flour.	Feed.	Total weight recovered.	Per cent. of flour.
		lbs.	lbs.	lbs.	lbs.	Per cent.
1	1 Hard.	476	337	125	462	70.8
2	1 "	473	330	127	457	69.8
3	1 Northern	556	389	148	537	70.0
4	1 "	481	334	126	460	69.9
5	1 "	509	360	132	492	70.7
6	2 "	473	323	134	457	68.3
7	3 "	480	328	136	464	68.3
8	3 "	477	325	136	461	68.1
9	3 "	488	333	131	464	68.2
10	No. 4	495	337	139	478	68.0
11	Feed	477	317	140	457	68.2

NOTE.—Lot 5 was what is known as "stook-frozen" or "riffled" wheat. Lot 9 was intended for No. 2 Northern and Lot 11 for No. 4, so as to have each grade in duplicate, but were placed a grade lower by Mr. Horn.

TABLE II. MOISTURE AND PROTEIDS IN THE DIFFERENT GRADES OF WHEAT.

Lot.	Grade.	Moisture.	Total proteids, N.X. 5.75.	Proteids soluble in 70 per cent. alcohol solution, N.X. 5.75-gliadin.	Per cent. of total proteids soluble in alcohol.
		Per cent.	Per cent.	Per cent.	Per cent.
1	1 H	11.74	11.89	4.87	40.95
2	1 H	11.93	11.81	5.06	42.84
3	1 N	10.75	12.205	5.24	42.91
4	1 N	11.31	11.65	5.043	43.29
5	1 N	11.79	11.195	4.525	40.40
6	2 N	12.11	11.985	4.94	41.20
7	3 N	11.02	11.625	4.92	42.30
8	3 N	11.05	10.745	4.525	42.09
9	3 N	11.16	11.85	4.90	41.35
10	No. 4	11.02	12.165	5.00	41.08
11	Feed	11.24	12.695	5.147	50.53

The object of the above analysis was to determine whether there was any marked difference in the amount of moisture present in the different grades of wheats, and to get figures showing the comparative amount of proteids, and the proportion of these soluble in alcohol. From the results shown in the above table, it is evident that there is no decided difference in this way between the various grades.

TABLE III. ANALYSIS OF THE FLOUR FROM DIFFERENT GRADES OF WHEAT.

Lot.	Grade.	Gluten.		Proteids.			Percentage of total proteids soluble.		Acidity.
		Wet.	Dry.	Total proteids, N.X. 5.75	Salt soluble, N.X. 5.75.	Alcohol soluble, N. X. 5.75 gliadin.	In salt.	In alcohol.	
		Per ct.	Per ct.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	
1	1 H	31.16	13.29	10.91	2.39	5.77	21.85	52.8	.27
2	1 H	35.02	13.84	10.84	2.385	6.32	21.99	58.29	.27
3	1 N	32.14	12.66	11.13	2.385	5.37	21.40	48.24	.28
4	1 N	31.67	11.24	10.89	2.19	5.95	20.10	54.59	.28
5	1 N	31.66	12.13	10.18	2.23	5.725	22.01	56.51	.275
6	2 N	33.77	12.78	10.65	2.16	6.08	20.22	59.09	.275
7	3 N	30.45	12.15	10.65	2.35	6.20	22.06	58.22	.277
8	3 N	27.05	10.89	9.98	2.28	5.91	22.84	58.21	.284
9	3 N	31.18	12.08	10.09	0.92	6.025	8.97	58.75	.268
10	No. 4 ...	33.81	13.38	11.13	2.39	6.34	21.47	56.95	.28
11	Feed ..	29.48	11.39	10.33	2.30	5.625	22.26	54.46	.30

In explanation of the figures given in the above table, I may state that the value of a flour for bread-making purposes depends largely upon the amount and nature of the proteids it contains. The gluten proper forms part of the proteids; but, as determined by the washing process, there is always present in it some insoluble fat, fibre, etc., and thus almost invariably the percentage of dry gluten is higher than that of the total proteids. The true gluten is a mixture of two substances known as glutenin and gliadin. The latter is a viscous, sticky substance like glue; the former, a pulverulent material which gives body to the gluten. It is now generally considered that the quality of a gluten depends upon these two substances being present in proper proportions. A gluten very rich in glutenin is dry and short, does not rise easily and gives after baking a compact mass; a gluten too rich in gliadin behaves well during fermentation because it is soft and yielding, but, in baking the gliadin dissolves before coagulating, thus allowing the gaseous products to escape and the dough to spread itself and collapse.

The wheat grown throughout Manitoba and the Northwest Territories in 1902 was all low in gliadin, therefore as high a quality of bread could not be made from it as from that grown in 1903, which contained a much higher percentage of this substance. Reference to the figures in the preceding table indicates that there is no regular difference in the quantity of total proteids and gluten, or in the quality of the gluten between the higher and lower grades of wheat. In fact the percentage of total proteids soluble in alcohol (gliadin) is lowest in one of the samples of No. 1 Northern and the second lowest in one of the lots of No. 1 Hard.

The flours made from the various grades of wheats were baked three times, once on the 9th and 10th of June, almost immediately after the grinding was done, and a second and third time on the 20th and 21st of September. Nearly four pounds of each flour was used in the first baking test and about ten pounds in each of the second and third. The first baking was done by one experienced baker, using small ovens, while the last tests were made by two thoroughly competent bakers working together, and the bread was baked in a large oven in which all the loaves made from one full set of samples could be baked at once. The yields of bread obtained are given in Table IV.

TABLE IV. YIELD OF BREAD FROM 100 POUNDS OF FLOUR MADE FROM DIFFERENT GRADES OF WHEAT.

Lot.	Grade.	Weight of bread per 100 lbs. of flour.			Average of 2nd and 3rd bakings.	Quality of 2nd and 3rd bakings.
		1st baking.	2nd baking.	3rd baking.		
		lbs.	lbs.	lbs.	lbs.	
1	1 H	148.4	139.6	145.5	142.5	92.0
2	1 H	168.0	148.5	144.3	146.4	96.0
3	1 N	148.3	148.5	145.0	146.7	95.0
4	1 N	141.9	141.9	147.8	144.8	92.0
5	1 N	141.6	140.4	140.9	140.6	95.0
6	2 N	145.0	148.0	150.4	149.2	90.0
7	3 N	119.3	148.6	152.1	150.3	100.0
8	3 N	152.0	145.4	148.0	146.7	100.0
9	3 N	152.1	157.9	150.2	154.0	95.0
10	No. 4	151.6	155.5	151.1	153.3	80.0
11	Feed	146.7	150.1	153.3	151.2	80.0

Lots 2 and 7 gave quite different results in the first baking to what were secured in the second and third. Otherwise the yield of bread obtained from the various flours in the different bakings may be considered fairly close.

The quality of the bread is indicated by the figures given in the last column of the above table which were allotted by Miss Watson, Lady Principal of the Macdonald Institute, Guelph, and Miss Given, Instructor in Cooking, in the same institution. The best loaves were taken as a standard, and the others were graded from that. The bread made from Lots 10 and 11 was darker in color and of poorer texture than the others, but still good bread and of a nice appearance.

In order to further test some of these samples of wheats, I sent a small lot of wheats marked 1 H, 1 N, 2 N, and 3 N, to the Columbus Laboratories, Chicago. Their full report is as follows:

TABLE V. REPORT OF THE COLUMBUS LABORATORIES.

	Standard spring Patent.	One Hard.	One Northern.	Two Northern.	Three Northern.
Gluten	11.00	10.6	10.04	9.8	10.5
Ash .....	.42	.47	.48	.55	.53
Absorption	62.00	62.0	60.0	61.0	60.0
Colour	100.06	93.0	91.8	92.4	95.6
Loaves per barrel	100.00	100.0	98.8	99.4	98.8
Size of loaf	100.00	95.0	95.0	94.0	95.0
Quality of loaf	100.00	97.5	97.5	98.0	97.5
Average value	100.00	96.4	95.5	95.9	96.7
Fermenting period	100.00	100.0	99.2	94.2	99.6
Quality of gluten	100.00	98.1	99.6	101.0	98.5

NOTE.—In the above report the gluten and the ash are expressed as parts in each one hundred parts of the flour. The "absorption" is the amount of water necessary to add to one hundred parts of flour to make a dough of stand-

ard stiffness. The remaining values are so expressed as to show the relation to standard flour which for the purpose is given a value of 100 per cent. The loaves produced are made under carefully controlled and uniform conditions, and baked in accurately graduated baking cylinders in an electric oven. The value expressed as quality of loaf is expressed in per cent., is the mean value of colour, loaves per barrel, size of loaf and quality of loaf. It should not be taken alone in comparing the value of flours, but each of the factors of which it is made up should receive consideration.

Being straight grade flours the colors are low on these figures compared with that of the standard patent. In a patent flour, also, the quality of the loaf would equal that of our standard, as they are good in all particulars except color due to the straight flour. The gluten of these flours is small, and the loaf volume is correspondingly small. The quality of gluten is always somewhat better in the patent flours than in the straight grade from the same wheat. The absorption of the flours is fair for wheats of last year. The weight per bushel of these wheats was 1 Hard, 63 lbs.; 1 Northern, 60 lbs.; 2 Northern, 62 lbs.; and 3 Northern, 65 lbs. The amount of flour from each was 1 Hard, 75.6 per cent.; 1 Northern, 73.1 per cent.; 2 Northern, 73.7 per cent.; and 3 Northern, 73.7 per cent. These amounts are based on clean wheats.

Very truly yours,

THE COLUMBUS LABORATORIES.

Conclusions.

From the results of the work reported in the preceding tables, it would appear that there was not much difference in the real value of the different grades of wheat. It is also apparent that the sample marked "Feed" (Lot 11) was not by any means useless for bread-making purposes, either from standpoint of yield or quality of bread. For instance, if quality* in the bread be left out of the comparison and we value bread at 3 cents per pound and the feed and low grade flour at 1 cent per pound, 100 pounds of wheat of Lot 2 produces bread and feed worth \$3.10, and 100 pounds from Lot 11, of "Feed" produces products worth \$3.06, while the products of the same quantity of Lot 9 would be worth \$3.17.

On the other hand it must be remembered that these results are obtained from a very few samples of wheat. The nature of the soil, the number of crops grown in it since "breaking," the weather at the time of ripening, etc., all have an influence on the quality of the wheat. Therefore, these results, while accurate for the samples submitted, should not be given too much importance until they are confirmed by further work.

PRESTON, STANLEY, AND PERCY WHEATS.

The Northwest Territorial Government also sent samples of varieties of wheat known as the Preston, Stanley, and Percy to us for analysis. These are comparatively new varieties and have been grown in the Northwest for only a few years. Considerable discussion has arisen as to whether they are

*The bread from lots 10 and 11 were dark enough in color to seriously discredit them for bakers' use, as public put great stress on color of bread.

equal in quality with the old Red Fife so well-known throughout that country. The results of the analyses are as follows:

ANALYSIS OF PRESTON, STANLEY, AND PERCY WHEATS.

Wheat.	Moisture. %	Total Proteids.	Proteids sol- uble in alcohol, gliadin.	Per cent. of total proteids soluble in alcohol.
Preston	10.45	11.97	5.22	43.60
"	11.86	11.11	4.81	43.66
"	11.36	12.14	5.46	44.97
Stanley	10.74	12.76	5.54	43.41
"	10.86	11.36	4.70	41.37
Percy	11.13	12.8	5.37	44.45

These wheats contain a fairly high percentage of proteids, fully as high as the samples of the various grades previously mentioned. They also contain as much alcohol soluble proteids, or gliadin, as the wheats referred to, and, so far as can be judged from these results, ought to be equal to them for flour purposes.

QUALITY OF FLOUR FROM WHEAT GROWN IN MANITOBA AND NORTHWEST TERRITORIES IN 1904.

The flour made from wheat grown in the North West in 1902 was not of good quality. The bakers complained that it was weak, and would not stand the proper amount of fermentation. This year similar complaints are being made, and several samples of flour have been sent to us for analysis. One baker states that "We have used less heat in setting sponges now than we did in the summer. The dough works soft, and the bread is inclined to be sad. . . . We use a dough mixer, and dough does not toughen up but the blades of the mixer cut through it." Examination of the flour two years ago revealed the fact that it was low in gliadin, the constituent of gluten which gives tenacity to the dough. Last year the percentage of gliadin was higher, and the flour was of better quality. This year the proportion of gliadin is again low, and it would appear as though this is the cause of the trouble complained of.

The following table gives the average results of the analysis of a number of flours made during the last four years:

PER CENT. OF TOTAL PROTEIDS AND GLIADIN IN FLOUR.

Number of samples analysed.	Grade of flour.	Year wheat was grown.	Total proteids.	Gliadin.	Per cent. of proteids in form of gliadin.
4	Patent	1901	11.65	7.64	65.5
4	Patent	1902	12.83	6.20	48.3
11	Straight ...	1903	10.61	5.94	55.9
13	Patent	1904	10.34	5.22	50.5

Investigations have not yet made plain just what proportion of total proteids of a good flour should be in the form of gliadin. The Patent grades of flour always contain a larger proportion of proteids in the form of gliadin than the lower grades, and, consequently, are stronger flours. All the differ-

ent samples of flour analysed were of Patent grade, excepting those of the year 1903, when they were all "straight" grades, only 10 per cent of low grade having been removed. This will account for the somewhat low gliadin figure for that year. It is evident, then, that the flour made from wheat grown in 1904, —like that of 1902, is low in gliadin. In one case two samples of "Patent" flour, both from new wheat, were submitted for examination. One was marked "No serious trouble with", the other, "very much trouble with". On analysis it was found that the former contained 54.4 per cent. and the latter 50.3 per cent of proteids in the form of gliadin. As no other difference in these flours was found, it would appear that this was the cause of the trouble. This would indicate that the wheat from some sections is better than others, but we have no data at hand to warrant the drawing of definite conclusions on this point.

The effect of low gliadin content would be that the gluten would be weak, the acids developed during fermentation would more quickly dissolve or "rot" the tenacious part of the gluten and allow the gases to escape. As a result the bread would be heavy. Just what causes this low gliadin content in the wheat is no known. It apparently is not caused by the soil, for these variations in strength come from year to year in wheat grown on the same soils. It is more likely due to weather conditions at the time the nitrogenous substances are being transferred from stem to seed, or during the ripening process. The only remedy we can offer at present is to grind as much as possible of the wheat of 1904 with that grown in 1903, or mix it with some of the softer winter wheats which naturally contain large proportions of gliadin.

ACIDITY OF FLOUR.

During the last year we have determined the acidity of a large number of flours. The better grades of flour show a very small acid content, but the amount increases with the lower grades. Flours which have taken up an undue amount of moisture or, which have been made from damp wheat, also show high acid content. The object of our work in this connection is to determine, if possible, the limits of acid which will occur in flour of the various grades, but, more particularly to secure figures showing the limits of acid in sound flour, and then, by using an alkaline solution to measure the acidity, give the millers and bakers a simple and efficient method of determining the soundness of flour. Such a method is very much needed, but before it can be used intelligently we must examine enough good and bad flours to determine the proper limits of acid.

SWAMP SOILS.

Scattered here and there throughout almost every township in the older part of Ontario there are many swamps varying in size from a few acres to hundreds of acres, and amounting in the aggregate for the whole Province to many hundreds of thousands of acres, which have been drained and brought under cultivation. These soils are usually very black and very rich in organic matter, and they are frequently drained at great expense with the expectation that they will be very productive and almost inexhaustible, but not infrequently the results have been disappointing.

In response to an evidently growing demand for further information regarding the best methods of treating this class of land, we have decided to study their deficiencies, and hope before long to be able to report some definite method of treatment that will give more uniformly good results than are at present obtained.

Last spring, we sent out nearly one thousand circular letters to farmers in different parts of the Province who owned and were cultivating swamp land.

asking for certain general information. A very large percentage of these circulars were returned with the questions fully answered. From the information gathered, it is evident, as might be expected, that there is a great difference in the depth and state of decomposition of the black materials, and in the nature of the underlying substances. In some cases the black top soil is but a few inches deep and well decomposed; in others, it is many feet deep and contains much coarse, partially decayed, woody matter, which when drained is incapable of holding enough moisture to produce a crop of roots or grain. In most instances, the organic matter of these swamp soils consists largely of partially decayed sphagnum moss. Later in the life of the swamp, and particularly where the accumulations of organic matter has not been large, trees, such as cedar, tamarac, elm, ash, etc., have added their quota of decaying matter to that already present. The water which gathers in these swamps is usually surface-drainage or seepage water, and contains sufficient of the essential elements of plant food to supply the needs of the plant life in it; but, as the accumulated organic matter decays, the ash constituents, potash, phosphoric acid and lime, revert to soluble forms and are carried away in the drainage waters flowing from these swamps, or down into the subsoil. If the subsoil is clay, it may gradually become very rich in these ash constituents; if it is sandy, most of them will be lost, as the sand has not the same power of holding these fertilizing substances. Naturally, then, these swamp soils will be rich in nitrogen and comparatively poor in the ash constituents.

Many of the farmers to whom circulars were sent, state that they have been getting excellent results from this class of soils, while others state that when grain was grown, a great deal of straw was produced, almost always lodging badly and the grain filling poorly. This would be the natural result where the land is rich in nitrogen and poor in the ash constituents. Many farmers have found that where the clay subsoil can be mixed with the top black muck good results are secured. The reason for this is apparent. But where the top soil is too deep to allow of this, or where the subsoil is sandy, this method of treatment cannot be followed. In some cases the reports show good results following the burning off of some of the top soil. Where there is a great depth of black muck, this method may be followed and the remaining soil improved because the ash produced brings up the balance between the various essential constituents for plant growth; but the danger is that the fire will run too deep and destroy all of the organic matter and leave the soil poor in nitrogen, the constituent which is naturally so abundant. At best, the method is wasteful, and should not be followed except in extreme cases and at times when the fire can be controlled.

With the object of gathering some definite knowledge of the composition of these swamp soils, we have collected and analysed 35 samples of various types. In every instance we have a record of the previous cultivation and the nature of growth on these soils. None of the soils could be said to be "sour" or acid, although a few were rather low in lime. They, however, all contained a low percentage of both potash and phosphoric acid, much lower than the ordinary arable lands, and they were all exceptionally low in "available" ash constituents. Some good authorities state that soils to be productive should contain as much as .03 per cent. of potash and phosphoric acid in a form available for plants. Only a few of them reached this minimum limit, and many of them contained as small an amount as .005 per cent.

It is our intention to follow up the study of these soils with co-operative experiments with fertilizers next season, and some of the owners of the soils from which the samples analysed were taken have signified their willingness to carry out these experiments.

ABITIBI SOILS.

During the last excursion of the Provincial Bureau of Mines Exploration Party into the Abitibi District, Mr. A. Henderson, Biologist of the party, collected a number of samples of soils typical of the sections passed through. As we could not undertake to analyse all the soils collected, Mr. Henderson selected seven samples, each of which had been gathered in such a way as to fairly well represent the soil characteristic of as many different sections of the country and submitted these for analysis.

The following notes on the location and the trees growing on the soil from which the samples were taken were made by Mr. Henderson:—

No. 5. From Frederick House River bank at the north boundary of Mann township. Timber—spruce, six to eight inches, birch 5 to 6 inches, and poplar 10 inches in diameter, growing about 40 feet high.

No. 8. From north boundary of 3rd township north of Tulley. Surface of ground cut by many ravines 20 to 40 feet deep, with clay bottoms and a somewhat thin layer of sandy soil on the elevations. Sample taken from elevations between the ravines. Heavily timbered, principally birch, spruce, and poplar, 16 to 20 inches in diameter.

No. 9. From Teefy township. Characteristic soil of the Abitibi River bank, extending from one-quarter to two miles back from river. Heavily timbered, poplar, spruce, balsam, and occasional birch and Jack pine, trees large. There is a well decayed covering of humus six inches deep.

No. 11. From Knox township, Jack pine soil. Principal trees Jack pine, poplar, black spruce, and a few birch, rather small. Very little decaying organic matter on surface.

No. 17. From Teefy township, at Iroquois Falls. The most common soil in the Abitibi District,—the representative soil,—along with No. 9 of the great "clay belt." Timber is poplar, spruce, and balsam,—poplar grow very large.

No. 23. From bank of creek flowing into Frederick House River near the point where it crosses Niven's line (mile 157). Timbered with spruce, poplar, balsam, 8 to 15 inches in diameter. Scattered timber, much wind fall. Cedar 12 inches in diameter along water edge.

No. 30. From bank of creek in Knox township. A common soil along creeks and rivers. Luxuriant growth of river hay, willows, alders, etc. Apparently the most productive soil in the Abitibi district.

The following table gives the composition of the soils. The samples were taken below the layer of decaying organic matter, and may, therefore, be considered subsoils.

COMPOSITION OF SOILS FROM ABITIBI DISTRICT.

Constituent.	No. 5	No. 8	No. 9	No. 11	No. 17	No. 23	No. 30
Moisture.....	1.4	0.22	3.4	0.72	4.30	3.91	5.29
Organic and Volatile.....	3.9	1.39	13.55	3.64	14.33	7.36	18.24
Insoluble Residue.....	86.3	96.0	67.3	68.7	64.8	68.1	34.3
Iron and Aluminium Fe ₂ O ₃	6.52	1.04	9.23	4.3	12.15	14.45	11.814
Lime CaO.....	0.796	0.46	1.615	0.91	1.285	1.08	1.91
Magnesia (MgO).....	0.51	.....	0.482	0.767	1.34	2.26	0.60
Potash (K ₂ O).....	0.25	0.066	0.75	0.118	0.74	0.864	0.96
Phosphoric acid (P ₂ O ₅).....	0.115	.....	0.17	.....	0.143	0.106	0.238
Total Nitrogen.....	0.067	0.047	0.387	0.07	0.297	0.12	0.512
Humus.....	1.28	0.45	6.98	0.90	5.06	1.07	6.42

The above table of analysis does not give definite information regarding the form of combination of the various plant food constituents, nor does it tell how much of the potash and phosphoric acid are in an available form; but it does show plainly which soils have enough plant food to rank as good productive soils, provided the physical conditions are right. Soil No. 8 is low in every one of the valuable plant food constituents, and is utterly unfit for agricultural purposes. No. 11 is very little better and No. 5 is hardly up to the minimum limits for good crop production. Fortunately these soils form a comparatively small part of the Abitibi district and should never be cleared up, but should be kept as forest reserves. According to the figures in the table, soil No. 30 should, other conditions being equal, give the best results when it is put under cultivation. This agrees with Mr. Henderson's notes, for he pronounces this the most productive soil in the whole Abitibi district. The most important point in connection with these analyses is, however, the fact that soils Nos. 9 and 17, which Mr. Henderson states are the representative soils of the "clay belt," are well supplied with lime, potash, phosphoric acid, and nitrogen. They are a little low in phosphoric acid, but it must be remembered these samples were taken below the top black mould and are, therefore, more likely to be poor in this constituent. It is very doubtful if any of the ordinary soils of older Ontario ever contained a larger amount of the mineral constituents required for plant growth than these Abitibi soils.

INSECTICIDES AND FUNGICIDES.

LIME SULPHUR WASHES.

Last spring at the request of a number of the fruit growers of the St. Catharines district, I went to St. Catharines and prepared a number of barrels of the lime, sulphur, and sal soda wash according to the formula proposed by Dr. E. P. Felt, State Entomologist, New York State, which is as follows:—

Lime	25 lbs.
Sulphur (flowers).....	20 "
Sal soda	12½ "

I also prepared a number of barrels of the lime-sulphur-caustic soda wash. This wash, I believe, was first used by the Geneva Experiment Station, New York State. The formula is as follows:—

Lime	30 lbs.
Sulphur (flowers).....	15 "
Caustic Soda	4 to 6 "

In preparing these mixtures, we first placed 5 or 6 gallons of hot water and the sulphur in a barrel and thoroughly mixed the two together. The lime was then added and the whole mass stirred to prevent caking on the bottom of the barrel. If the lime is fresh and of a quick slaking kind, it may be necessary to add a little cold water to prevent the mixture boiling over. When the violent boiling ceases, add the caustic soda or sal soda, whichever may be used, and stir to mix it with the contents of the barrel. Cover the barrel with any material that will help retain the heat and let stand for 20 minutes to half an hour, when it is ready for use. The washes thus prepared developed the deep orange red color of the well boiled mixtures, and, from the observations made by competent men, appeared to give almost, if not altogether, as good results as the lime-sulphur

wash prepared by boiling. A full report of these experiments will be found in the Fruit Growers' Report for 1903. I would like to strongly emphasize the fact that the greatest care must be exercised in the preparation of these washes. Only fresh burned lime of quick slaking kind should be used, and even then it is better to select the larger stones; in fact every care should be taken to recover the maximum amount of heat from the slaking. The caustic soda should not be used in the lump form, but must be in a granulated or powdered condition, so as to allow of its going into solution quickly.

The washes are no better and possibly not so efficient as that prepared by boiling, but the ease with which they may be prepared will greatly recommend them to the fruit grower who has not enough trees to warrant him installing a steam boiling plant.

FUNGEROID.

Some of this fungicide was used in the Niagara district on grape vines affected with the grape rot. For this purpose it was applied after the grapes were nearly full grown by means of a specially prepared machine. It is a light grey, practically anhydrous powder. The samples analysed had stood for sometime exposed to air, and had doubtless absorbed some moisture. As the composition of this fungicide will be of interest to a large number of fruit growers, the results of the analysis are given below:—

Cupric oxide (CuO)	13.52 per cent.
Sulphuric anhydrous (SO ₃).....	14.42 "
Lime (CaO)	41.04 "
Sodium oxide, carbon dioxide and water....	31.02 "

It evidently contains much more lime than there would be in the solids of the soda Bordeaux prepared according to the usual formula, but a little less than in lime Bordeaux of the old 4.4 and 4.0 formula.

PRESERVATIVES IN BUTTER.

It is a well-known fact that it is only by exercising the utmost care through every step in the production of the milk, handling of the cream, and manufacture of the butter that the delicate, fresh, sweet flavor so much desired in good butter can be secured. It is also well-known that even the most carefully prepared butter deteriorates after its manufacture, and that it requires intelligent, skilful handling to retain its fresh aroma long enough to reach the British market, which is our best, and, at the same time, most critical customer.

Butter-making is essentially the separation of the fat as completely as possible from the milk and cream and recovering it in a compact mass, consisting almost of fat and water. The fat consists of a number of compounds composed of acids in union with glycerine, and belongs to the same class of compounds as many of the flavoring substances in fruits, flowers, etc., some of which have the most delicate odors; but which upon decomposition yield volatile products of a decidedly offensive nature. Furthermore, some of the fats are unsaturated compounds, which, doubtlessly, more or less readily combine with the oxygen of the atmosphere and thus set in motion changes which may not only destroy the pleasant flavoring substances, but also produce the disagreeable rancid smell common to bad butter.

In addition to fat and water, butter also contains a small amount of nitrogenous and mineral matters. The amount of the former substance in good creamery butter is not large, and, while it readily undergoes putrefaction changes, does not appear to directly affect the keeping quality of the butter. It, however, serves as a food for the micro-organisms present, which causes the changes and thus serves indirectly to produce bad flavors.

It will thus be seen that the constituents of butter in their natural state are all delicate substances, some of which, or a combination of the whole, produce the peculiar aroma of good butter, and that some of the fats, especially the glycerides of the volatile unsaturated acids, may be easily decomposed.

All the faults of butter may, in a general way, be grouped into two classes: First, those faults which appear immediately after it is made; and second, those which are acquired from standing, caused either by the absorption of different taints from unfavorable environment, or by the development of undesirable germs already present in the butter. The faults which fall into the first group are those which originate from the food, infection of milk, or cream with undesirable ferments, and improper methods of manufacture. Through special efforts in the feeding of cows, and skill in the care and treatment of milk and cream, these faults can be overcome. They are within the control of man.

Those faults which come under the second heading are, as a rule, natural to butter in a greater or less degree. All butter will go "off" flavor on standing, no matter what methods of procedure are adopted in its manufacture. We cannot wholly eliminate the cause of deterioration, but we can retard or delay the action of the enzymes, or whatever it may be that cause the splitting up of the fats and the production of the rancid flavor, and thus make it possible to keep butter longer.

There appears to be three ways by which this may be done, namely, (1) by pasteurizing; (2) keeping the butter in cold storage, and (3) by the use of preservatives, or better, by the combination of all three methods of treatment. Salt is the preserving material which we have depended upon almost entirely in the past, but the English market now demands large quantities of practically saltless butter. If then salt cannot be used, it would appear all the more necessary that something else be added to the butter to prevent or retard the action of the micro-organisms through whose agencies the various changes are brought about which produce what are called "off" flavors.

The Dairy department has conducted a large number of experiments to study the effect of preservatives on the keeping quality of butter, and we have analysed samples of nearly all the different brands in use in the Province and gathered other useful information regarding their use. It is our intention to prepare almost immediately a joint bulletin, in which the details of this work will be given, and, therefore, I will not take up these results in this report.

NEED OF INCREASED ACCOMMODATION.

I desire again to call your attention to the fact that the laboratories in the Chemical building are altogether too small for the purposes for which they are required. We are endeavoring to give laboratory work to all of our classes in chemistry, and for this purpose have the table space originally planned for 32 men. When it is pointed out that we have 100
5 A.C.

students in the First Year, 60 in the Second Year, 26 in the Third, and 30 in the Fourth, and that the senior years are given the regular courses in qualitative and quantitative analyses, and also go through the analysis of soils and fodders, it will be seen how inadequate the accommodation is. In addition to the classes mentioned, we have, this past term, had 25 young ladies from the Domestic Science Department taking inorganic chemistry, and as many more studying the Chemistry of Foods. We have tried to make the best possible use of the space, but the students have been too much crowded to do thoughtful work. As the needed laboratory space can be added without tearing down any part of, or in any way injuring the present building and at comparatively little expense, I sincerely hope that some addition may be made to the building before another College year opens.

Respectfully submitted,

R. HARCOURT.

December 30th, 1904.

PART VI.

THE LECTURER IN CHEMISTRY.

To the President of the Ontario Agricultural College:

SIR,—I beg to submit herewith a brief report of my work for the year ending December 31st, 1904.

TEACHING.

During six months of the year my attention has been entirely concentrated on teaching. The ground covered was practically the same as that outlined in previous reports. It is, therefore, unnecessary to take up valuable space with a review of this work. I would like, however, to emphasize the importance of the lectures and laboratory work. As is well known, many of our young men come to the College with but a very elementary public school training. To such students the subject of Chemistry at first appears to be incomprehensible. Gradually, however, as the fundamental laws underlying the science are unfolded, the close relationship between it and practical agriculture is realized, and the student appreciates very greatly the value of even an elementary knowledge of the subject.

In teaching this subject, I have always found myself handicapped by insufficient equipment in the way of apparatus. It is necessary for the student to have a course of laboratory work to supplement the lectures. We hope, therefore, that a more liberal grant may be forthcoming, in order that this important branch of a scientific agricultural education may attain the highest degree of perfection.

The work of the dairy class is an important part of the teaching. In this, as in all our instruction, the practical side is emphasized. It is perhaps, impossible to point to any specific number of cases where the good that

a training in elementary chemistry for dairymen can be accurately measured. Yet, we are confident from the keen interest exhibited by the members of our dairy classes that the instruction given has not been lacking in good results.

The conduct of the student body in the class room has been excellent, and I am proud to say that the eager interest of our students in their studies has been a great source of satisfaction as well as a great incentive to me.

WORK COMPLETED.

A bulletin, which is now in the hands of the printers, contains figures representing some 250 analyses of by-products from the mills of Ontario. This work will be continued for some time in order to ascertain the average composition of by-products, such as oat bran, shorts, pea hulls, etc.

INFORMATION REGARDING THE CONDITION OF OUR EXPORT TRADE WITH GREAT BRITAIN.

Anyone who has followed the development of export trade must realize that we have an invaluable market in the mother country. But many fail to appreciate the fact that in order to establish a sound business with Great Britain we must supply her merchants with goods of the very best quality. The average English consumer does not consider the cost of household commodities so long as his taste is gratified; but he strongly objects to paying even a very low price for an inferior article. The price paid for Canadian cheese and butter illustrates this fact very well. In the case of cheese, there is a large and growing demand for this article in England; whereas, at the present time, there appears to be a very strong prejudice against Canadian butter. It is gratifying to know, on account of the large manufacture of cheese in Canada, that our output receives such satisfactory mention by leading merchants in London, Manchester, and other large centres. At the same time, it should be a matter of sincere regret to all true citizens of Canada that our export butter does not reach to the same degree of excellence. Every effort should, therefore, be put forward to place our butter on the market in a condition such that it will command the highest price. The difference in cost of manufacture and proper handling of this perishable product of the farm would be practically nil as compared with the enhanced price which it is possible to obtain.

What has been said of our cheese and butter applies in a general way to our canned goods trade. It was with the object of obtaining some reliable information along this line that the writer, during the past summer, visited a number of the leading wholesale houses in the Old Country.

Canned Peaches, Pears, and Apricots. A number of the wholesale houses did not handle Canadian canned goods at all. In other houses where our canned goods are to be found the general complaint was that our peaches, pears, and apricots are pulpy in appearance. When our cans were opened and compared with those sent from the United States the difference was very marked. The fruit from the other side of the line retained its perfect form, and was certainly more attractive than ours, half of which was in pulp and had more of the appearance of boiled turnips than of fruit.

The general impression among the merchants appeared to be that our manufacturers purchased the fruit after it had become too ripe, or else that a very inferior variety of fruit, such as windfalls, etc., was used. Notwithstanding this fact, the flavor of our canned peaches was excellent, in fact much

superior to that of the California fruit. The general consensus of opinion appeared to be, however, that Canadian manufacturers must look more closely after the raw material if we are to have a leading place in this very important industry.

Canned Raspberries. The writer was shown a very fine display of canned raspberries. The fruit was put up in glass sealers, which were neatly labelled. This particular kind of fruit presented a very attractive appearance, and sold readily at good prices. In speaking of this fruit, Mr. Robinson, of the firm of Hanson, Son, & Barter, said: "We cannot get enough of your canned raspberries to supply the demand. We have had to cancel a large number of orders for this brand this season. Our customers say the fruit is excellent. If more of your fruit could be put in glass the prices paid would certainly be much higher than they are at present."

Canned Tomatoes and Corn. There is a steadily-growing demand for tomatoes and corn in England. Some few years ago there was a decided prejudice against canned goods of any kind, the reason being that a few cases of poisoning supposedly resulted from eating such foods. This prejudice appears to be gradually dying out. But there is a complaint at the present time that our manufacturers are not sustaining their record in the matter of quality. One defect pointed out to me was a blackening of the corn at the top of the can. This was probably caused by the soldering iron scorching the corn during the process of sealing the cans. In contrast with the black surface exposed when a can of Canadian corn was opened, several merchants showed me how the American manufacturers overcome this difficulty. They place a clean piece of parchment paper over the corn, and in this way are able to obviate any blackening of the canned goods. One dealer told me that he did not so much object to a little of the corn being blackened, but it gave the customers a bad impression of the goods to see this black surface when the can was opened. The customers often mistake this blackening of corn for foreign matter, and very strongly object to it. A little care in sealing the cans, and a small piece of parchment paper placed underneath the lid prevents any such false impression.

Canned Peas. There is a very limited demand for Canadian canned peas on the English market, mainly, for the reason that most of our peas are white. The most of the peas sold in England come from France, and are colored by the use of a dilute solution of copper sulphate. I may further add that the canned pea trade in Great Britain at the present time is in a very unsatisfactory state, because of a law prohibiting the use of copper sulphate in any process of manufacture. The merchants say that it is absolutely impossible for them to sell canned peas unless they are colored, and it is practically impossible for them to obtain sufficient peas to supply the demand of their customers unless they are permitted to sell peas which have been colored by copper sulphate solution. Several merchants have been fined for selling such goods, and a number of cases are now before the courts pending the decision as to whether or not a small percentage of copper sulphate may be used in the process of manufacture of this particular article of food.

Canned Beef and Tongue. Some of our Canadian manufacturers have the reputation, in this particular line, of putting up a first-class article. In other cases the complaint is made that our canned tongue cannot compare with that placed on the market by Chicago firms. The main points of excellence in the American canned tongue appear to be: first, the neat attractive labels on the cans, second, a more attractive appearance of the tongue when the can is opened, and third, not so much of the throat of the animal is left at-

tached to the tongue. From the English buyer's standpoint the tongue should be freed from all appearance of the throat or gristle. The writer was shown several of these cans opened, and in some cases the complaint is quite justifiable.

In conclusion let me say that I believe there is an excellent market for canned goods in England. From what I was able to gather from conversation with prominent and reliable men in the business, I believe that it is possible for Canadian manufacturers to develop a very profitable business along this line. But in order to achieve the highest degree of success we must pay special attention to the following points: Our goods must be put up in the most attractive style. The cans must be neatly made, and the labels must be placed properly on the cans. (Appearance counts for a great deal in England). The goods exported must be of the very best quality if we are to compete successfully with our American neighbors. The goods should also be packed so as to prevent, in so far as possible, any injury to the cans. A final point, which of course is demanded in all lines of business, is to fill all orders promptly.

INVESTIGATIONS UNDERTAKEN.

The most important line of investigation to which I am devoting my attention is the question of the digestibility and relative food values of the different forms of cattle foods. Our equipment for carrying on this line of work is inadequate, but we hope that the results obtained may demonstrate the necessity of a more liberal grant for this line of investigation.

The second line of investigation upon which I am engaged is the analysis of the ash of our farm crops,—cereals, legumes, and tubers. The object of this work is twofold: First, to compare the different methods which have been suggested, and second, to study the distribution of the ash in the leaves, stems, and grains of our farm crops.

MISCELLANEOUS.

In the spring of the present year we prepared one gallon of standard alkaline solution for each of the instructors of the Western Dairymen's Association.

Recently I have made a chemical examination of several samples of canned fruits, to determine whether or not preservatives had been used in the process of manufacture.

Before concluding this brief report, I wish to thank you for leave of absence during the past summer, by reason of which I was enabled to travel and study agricultural conditions in the Old Land. I believe that the information gained by visiting various stations in England and on the Continent has been of material aid to me, both in the class-room and the laboratory.

Respectfully submitted,

W. P. GAMBLE.

PART VII.

THE PROFESSOR OF VETERINARY SCIENCE.

To the President of the Ontario Agricultural College :

SIR,—In submitting my report for 1903-1904 allow me to extend to you my congratulations upon your appointment to the presidency of the college after the resignation of the late president Dr. Mills.

CLASS ROOM.

The class-room work in my department has been much the same as in former years.

First year. During the fall term I gave to this class a course of lectures and demonstrations on Comparative Anatomy. This included a brief but comprehensive consideration of the skeleton, joints and muscular system; the digestive, respiratory, urinary, and generative organs; the circulatory and absorbent system; the eye, skin, and foot; and the nervous system, of the horse. Where possible we verified description by the examination of the skeleton and the living animal, and made all points as plain and practical as possible. Where important differences exist between the anatomy of the horse and other animals, notice was taken of the same.

During the afternoon lectures we discussed the erection of horse stables, as regards site, material, drainage, ventilation, kinds and arrangement of stalls, both single and box, feed boxes, mangers, floors, etc.; the general care of horses as regards feeding, watering, grooming, handling colts, educating them to drive, working and exercising them etc.; the general care of harness, saddlery, carriages etc. In addition to this I gave a course on Judging Horses. In this course we were, as in former years, badly handicapped in not having individuals of the different breeds and classes for demonstration and comparison. I used those we have, borrowed some, and supplied some from my own stable.

During the winter term I gave a course of lectures on Veterinary Materia Medica, in which I spoke of the properties, actions, uses and doses of the different medicines and remedies used for the prevention and cure of the ordinary diseases of domesticated animals. We also discussed the different methods of administering and applying medicines, with the advantages and disadvantage of each.

Second year. The fall term class-room for this class consisted in the consideration of the causes, symptoms, and treatment (both preventive and curative) of the ordinary diseases of farm stock, with frequent reference to the proper mode of feeding, watering, and general care of stock in order to prevent disease.

During this course I usually have a living horse in the class-room, and explain the different appearances of an animal in health and disease; point out the seat of disease when possible, and illustrate with specimens of diseased bone, etc., the changes of structure that occur during disease.

During the winter term I gave a course of lectures on Veterinary Obstetrics, treating on the phenomena of reproduction, the development of the foetus, the usual causes of sterility, and the methods by which some of them can be removed; the diseases of both sexes due to the act of reproduction; the general hygienic treatment of pregnant females, the phenomena of parturition, the manner of treating cases of difficult parturition, the causes, symptoms and treatment of diseases of both dam and offspring incident to and following delivery, and gave special attention to the care of the young. As far as possible I illustrated these lectures with charts, diagrams, etc.

During the afternoons I gave a course of lectures and demonstrations upon the practical methods of handling horses, securing animals for minor operations, as opening abscesses, dissecting out tumors, dressing and stitching wounds, castrating, firing spavins, ringbones, etc. I illustrated the different methods of applying bandages, stitching wounds, dressing teeth, administering medicines, scarifying lampas, passing a probang in the ox, puncturing in case of excessive bloating, etc.

In addition to the above I continued the instruction in judging horses commenced in the first year.

THIRD AND FOURTH YEARS. With these years I continued the course in judging horses, using those at our disposal, and visiting the establishments of local breeders and dealers.

DAIRY CLASS. To the special dairy class I gave a short course of lectures on the courses, symptoms, and treatment (both preventive and curative) of the ordinary diseases of dairy cattle.

SHORT COURSE IN STOCK JUDGING. This was held in January, and to its members I gave a course of practical illustrations in judging the different breeds and classes of horses. I was ably assisted in the draught classes by Robt. Ness, Esq., of Howick, Que. In this, as in the regular classes, we were badly handicapped by the absence of horses suitable for the purpose. We have in the farm stables a few fair representatives of the Agricultural horse, but not even a fair individual of any other class. I borrowed for the purpose suitable animals from the citizens of Guelph and from local breeders and dealers. I wish to take this opportunity of publicly expressing our gratitude for the kindness of the following gentlemen in providing us with subjects for comparison and discussion, viz., Messrs. Sorby, McCannell, Bowman, Atchieson, McKenzie, Tovell, Hales, Hurley, Stewart, Dr. Short, of Erin, and others. These gentlemen not only allowed us the use of their horses, but brought them to the class-room and good naturedly listened to the severe and often unjust criticisms to which they were subjected. The pavilion erected for the purpose affords good accommodation for the class and the horses, but it is not possible to show action properly in so small a ring, and when the weather is severe and the snow deep, as it was last January, we cannot take the animals outside to show action with any degree of satisfaction. In order to enable a horse to show action it is necessary to have a straight away track for 100 yards or more. We may look forward to the time when we will have a covered runway for this purpose. I would like to again draw the attention of the department to the facts already noted, viz., the absence at the institution of horses suitable for class-room purposes. We have not a pure-bred horse in the stables, nor even a fair representative of any class except the agricultural. For the special classes it is possible to borrow, but for the regular classes this is impracticable, as we cannot ask our friends and neighbors to be continually supplying us. In other classes of stock, it is very different. In cattle, sheep, swine and poultry there are a few pure-bred animals of most of the popular breeds.

DISEASES OF STOCK. Besides class-room and practical work I gave professional attention to all the stock, and am pleased to be able to state that the losses were comparatively few.

HORSES. We had several cases of the ordinary ailments in horses, viz., colic, indigestion, influenza, lymphangitis, calks, wounds, sore necks and shoulders, oedema, eczema, etc., all of which yielded to treatment. The President's mare broke her leg on the slippery roads in the latter part of the winter, and as there was no possibility of successful treatment she was destroyed. An old mare belonging to the Experimental department became useless, and practically helpless from old age, and she was destroyed.

CATTLE. We had several cases of retention of the placenta, maminitis, sore teats, impaction of the rumen, fardel bound, and other forms of indigestion, diarrhoea, constipation, uterine discharge, pyaemia, etc., all of which recovered. We had two cases of parturient apoplexy, commonly called "milk fever, one of which I treated by inflating the udder with oxygen gas, and the other with sterilized air. Both made rapid and perfect recoveries. We had a fatal case of inflammation of the womb in a Holstein cow of the dairy herd.

SHEEP. We had little trouble with sheep. We lost one ewe from scirrhus of the liver, and a few lambs from wool balls in the fourth stomach.

SWINE. We had little disease, and no losses in swine except in newly born pigs.

Respectfully submitted,

J. H. REED, V.S.

PART VIII.

THE PROFESSOR OF DAIRY HUSBANDRY.

To the President of the Ontario Agricultural College :

SIR,—I beg leave to submit my fourteenth annual report of the Dairy department of the College. The year has been a successful one. Our milk supply is now larger than it has ever been, and we hope during the coming year to place our Dairy department upon a commercial basis so far as our supply of milk farmers is concerned. This can be done by purchasing the milk outright as we have been doing, or we may make a charge of so much per pound for manufacturing cheese and butter, such as is done in ordinary cheese factories or creameries. We have paid for milk and cream during the past season about \$15,000. As our supply is increasing all the time, if we continue to purchase the milk we shall have to ask for a larger appropriation under this head. Our products now have a good reputation, and we can sell our manufactured goods at a price slightly above that obtained in the regular way. However, we have quite a heavy loss each year with milk, cream, cheese, and butter used for experimental purposes, for which there is sometimes little or no revenue, but we have valuable information for dairymen as a result of these experiments. There is also considerable extra expense and loss of product in teaching students practical dairying. Larger buildings, extra machinery and extra men are needed to give practical dairy instruction, so that it is doubtful if we shall ever be able to put the department on a paying basis in the ordinary sense of that term, but we are aiming at *economy consistent with the highest proficiency.*

IMPROVEMENTS.

A great many improvements have been made during the year. New cement floors have been laid throughout the dairy stable, also cement floors in the separator room of the dairy, the basement of the farm dairy and milk-receiving room of the cheese department. The steam boilers have been re-bricked, new steam pipes have been carried to the new dairy building, the system of heating changed to "low pressure," a new engine has been put in the dairy and the exhaust steam is now all utilized for pasteurizing skim-milk heating water, or heating the building. The buildings have been painted throughout on the inside, with the exception of the cheese room. An electric motor for cutting feed and pulping roots has been placed in the barn. You will thus see that it has been a year of rather extensive improvements, and our expenditure has been rather heavier than usual, but we feel that we have been amply repaid in extra conveniences and economy in manufacturing, to say nothing of improvement in appearances.

We still need our dairy stable properly ventilated, a weighing porch for the cheese room, and cement walks about the dairy. In the near future we shall need to provide a special branch for market milk. The demands upon our space and men in the preparation of milk and cream for the College, Macdonald Hall, and sundry customers is becoming too great to be carried on as we have been doing. We have furnished the College about \$1,300 worth of milk and cream this past year. Add to this the amount which is being sent to Macdonald Hall, and sold to officers and employees of the College, and you will see that this work alone is almost sufficient to keep one person employed for about seven months of the year.

I am much indebted to Messrs. Stratton and Taylor in the dairy, Mr. Wood in the stable, Miss Frew, accountant and librarian, and to the Instructors in the Dairy School for their help and co-operation during the year.

THE DAIRY SCHOOL.

In addition to the course of lectures and practical work given to the regular College Classes, we have had five special courses in Dairying during the year, attended by ninety-three students. The attendance has not been so large as usual. One reason was that the special lectures in Domestic Science were discontinued, as this work is now provided for at the Macdonald Institute. The Institute also took a considerable number of lady students who preferred taking Domestic Science, including Dairying, rather than Dairying, including Domestic Science. It is to be expected that young ladies would prefer a short course at the Institute where they have the privilege of taking Dairying as an optional subject, rather than devoting all or nearly all their time to dairy work.

Another reason for the smaller attendance is probably to be found in the fact that most of the factory cheese and butter makers have now attended a course in dairying at one of the three well equipped schools of the Province, and, as the field is somewhat limited, we may expect the attendance to be smaller than has been the case in the past.

With smaller classes we hope to be able to do better work. A class of twelve to fifteen students is all that one Instructor can properly look after, while at practical work a class of twenty or twenty-five is more than one person can adequately instruct.

We are improving our equipment and methods of instruction each year, and consider that the School was never in a position to do such good work as at the present time. Our dairy herd, dairy stable, and farm dairy are features which should especially appeal to men and women on the farm who wish to obtain the latest and best information regarding farm dairy work.

As in former years, we are indebted to Professors Harrison and Gamble for their valuable help and co-operation in bacteriological and chemical work. Our students, especially those taking the Instructor's course, are beginning to appreciate the value of this work in assisting them to solve practical difficulties in the factory and on the farm.

EXPERIMENTS IN CHEESEMAKING.

Owing to the large amount of extra work involved in making the changes and improvements in the dairy during the past year, we were unable to accomplish as much experimental work as in former years.

The work in cheesemaking related to the following: Different quantities of rennet for cheese ripened in cold-storage; Rennet and Pepsin as coagulating agents; Ice and mechanical cold-storage for ripening cheese; various temperatures for ripening cheese between 28 degrees F. and 55 degrees F.; Moisture in curd and cheese; and Boxing cheese directly from the hoops compared with boxing cheese one week after placing them on the shelf. We found it somewhat difficult to maintain the temperatures aimed at in the various rooms.

All the cheese were judged according to the following scale of points: flavor 40, closeness 15, even color 15, texture 20 and finish 10, total 100. All the cheese were given 10 points for finish. The final scoring was made by Mr. I. W. Steinhoff of Stratford on December 10th.

RENNET *vs.* PEPSIN.

Several firms are now recommending the use of pepsin instead of rennet as an agent for coagulating milk for cheese making. We have used two different brands for experimental purposes during the past season. One was supplied by Armour & Co. of Chicago, and the other by Frank L. Jones of Utica, New York. It is claimed that a better quality of cheese can be made by using the pepsin instead of the rennet.

The rennet used was Hansen's Extract. The quantity was $3\frac{1}{2}$ oz. per 1,000 lbs. milk. The pepsin is in the form of scales which are brought into solution by dissolving one ounce (about 28 grams) in 20 fluid ounces of water. It was recommended by the firms supplying the pepsin to use of this solution about the same quantity as of rennet. We found, however, that $3\frac{1}{2}$ oz. of this solution per 1,000 lbs. milk took too long to coagulate the milk, and it was necessary to add double this amount, or $6\frac{1}{2}$ oz. in order to obtain satisfactory coagulation. The coagulum does not in any case appear to have the same firm character as does that of milk coagulated with rennet. The acid also appears to develop faster in the curds from the rennet.

During the month of August eight experiments were made. Altogether we used 4,800 lbs. milk testing an average of 3.57 per cent. fat. For each test 300 lbs. milk were coagulated with rennet and 300 lbs. with pepsin. The average percentages of acidity at dipping, milling and salting were .194, .928, and 1.166 for the rennet lots, and .194, .902, 1.130 respectively for the lots in which pepsin was used. The average percentage of fat in the whey was .215 for both lots.

TABLE SHOWING QUALITY OF CHEESE MADE WITH RENNET AND PEPSIN.

Kind of Cheese.	Scorer.	Flavor. Max. 40. Av.	Closeness. Max. 15.	Even Color. Max. 15.	Texture. Max. 20.	Total. Max. 100.
Rennet.....	Dairy	36	13.8	14.1	17.7	91.7
Pepsin	"	36	14.0	14.0	18.0	92.0
Rennet.....	Mr. Steinhoff	34.9	14.3	14.0	16.0	89.2
Pepsin	"	35.5	14.2	14.0	16.0	89.7

Conclusions. 1. It is more difficult to prepare the pepsin solution ready for use. Usually about one-half hour is required to bring it into solution, and just enough must be prepared at one time as it quickly spoils after being added to water. The cheesemaker would object to the use of pepsin on this account, as he is usually very busy about the time, "the vat is ready to set."

2. The 2,400 lbs. of milk in which rennet was used produced 231.45 lbs. green cheese and 220 lbs. cheese weighed at the end of one month after making. The cheese lost 4.9 per cent. in weight during one month. The same weight of milk with pepsin gave 231.02 lbs. green cheese, and 218.75 lbs. cheese weighed at the end of one month. These lost 5.3 per cent. in weight in one month. The average yield of marketable cheese per 1,000 lbs. milk was 91.6 lbs. from the rennet, and 91.1 lbs. from pepsin, or about one-half pound less.

3. The quality of the cheese was slightly better by using the pepsin. The average of all scorings for flavor was 35.5 out of 40 for the rennet cheese and 35.8 for the pepsin cheese. The averages of the total scores were 90.7 and 91.1 for rennet and pepsin respectively.

MOISTURE IN CURD AND CHEESE.

These experiments are a continuation of those made last year. Four tests were made in July. Six hundred pounds of milk were used for each test. The whole milk was first mixed, then divided into two lots of 300 lbs. each. The percentage of fat in the milk averaged 3.7. The cheese marked A were designed to contain an excessive amount of moisture, and the B cheese were made with a normal amount of moisture in the curd and cheese.

TABLE OF MOISTURE AND ACIDITY.

	"A" cheese containing excessive moisture.	"B" cheese containing normal moisture.
Moisture at dipping.....	57.377	54.431
" " milling.....	42.438	40.965
" " in green cheese.....	35.979	34.571
Acid at dipping.....	.171	.178
" " milling.....	.852	.795
" " salting.....	1.160	1.090

The cheese were scored on Sept. 20th, and again by Mr. Steinhoff on December 10th.

TABLE SHOWING QUALITY OF CHEESE.

Method of Ripening.	"A" cheese—excessive moisture.			"B" cheese—normal moisture.	
	Scorer.	Av. Flavor. Max. 40.	Av. Total. Max. 100.	Av. Flavor. Max. 40.	Av. Total score Max. 100.
Mech. storage, 40° F.. {	Dairy	38	95	38	95.5
	Mr. Steinhoff	36	90.7	36.2	90.7
Ice storage, 40° F..... {	Dairy	37.5	93.5	37.5	94.1
	Mr. Steinhoff	36.5	90.2	36.7	91.2

Conclusions.

1. The cheese with extra moisture contained about three per cent. more moisture at dipping, one and one-half per cent. more at milling, and one and a half per cent. more in the green cheese. The acidity was also slightly greater at milling and salting in these cheese. The increased moisture caused an increased yield of marketable cheese equal to about one-half pound per 1,000 lbs. milk.

2. There was little difference in the quality of the cheese. From two years experiments we may conclude that an excess of one to two per cent moisture may be left in cheese ripened in cold-storage without much danger of the quality deteriorating, although the normal cheese scored slightly better.

3. The cheese with an excessive amount of moisture lost 4.2 per cent. during one month in mechanical storage and 3.9 per cent in ice storage. The normal cheese lost 3.6 and 3.3 per cent. respectively. The normal cheese lost less during one month. The loss in weight was also less in the ice storage than in mechanical cold-storage.

EXTRA RENNET FOR CHEESE RIPENED IN COLD-STORAGE.

It is now accepted as a truth that rennet has an important influence on the ripening of cheese. It is also conceded that an extra amount of rennet will cause the cheese to ripen more quickly. For cheese ripened at 70 degrees or above, an extra amount of rennet is not advisable, as there is danger of bad flavor and weak body in the cheese. In cold-storage, however, it may be desirable at times to hasten the ripening process by using more rennet than usual.

The following experiments are a continuation of last year's work. During August and September seven lots with normal rennet, (3 1-3 oz., per 1,000 lbs. milk) and seven lots with 6 2-3 oz. per 1,000 lbs. milk were ripened in mechanical cold-storage at about 40 degrees F. During the same months six lots with similar quantities of rennet were ripened in the ice cold-storage at about 40 degrees F. The average percentage of fat in the milk for all the lots in mechanical storage was 3.6, for those in ice storage the average was 3.8. The average acidity of the milk was .19 at the time of adding the rennet. The per cent. fat in the whey averaged .21 for both lots in both places of ripening. In all cases the milk was first mixed, then divided into two equal parts of 300 lbs. each. The rennet was then added at the rate of 3½ oz. per 1,000 pounds of milk to one vat and 6 2-3 oz. to the other. All other parts of the work were as nearly alike as possible.

The total yield of green cheese from 2,100 lbs. milk to which 6 2-3 oz. rennet per 1,000 lbs. milk were added, was 201.63 lbs. The weight of cheese at the end of one month was 194.13 lbs. ripened in mechanical storage. The per cent. lost in weight during one month was 3.71. The yield of green cheese from the same weight of milk to which 3½ oz. of rennet per 1,000 lbs. milk was added, was 201.95. The weight at the end of one month was 194.38. These cheese lost in weight 3.74 per cent.

In ice storage the yield of green cheese from the excess of rennet was 178.88 lbs. from 1,800 lbs. milk. The weight at the end of one month was 173.94 lbs., having lost 2.7 per cent. in one month. The green cheese from normal rennet weighed 178.7 lbs. At the end of one month they weighed 174.06, having lost 2.6 per cent in the month.

TABLE SHOWING QUALITY OF CHEESE MADE FROM 6½ OZ. AND 3½ OZ. RENNET PER 1,000 LBS. MILK.

Kind of cheese and method of ripening.	Scorer.	Average Score.				
		Flavor. Max. 40.	Closeness M. 15.	Even color. M. 15.	Texture. M. 20.	Total. M. 100.
6½ oz. rennet, Mech. Stor.	Dairy	38.2	14.2	14.4	18.8	95.8
3½ " " " "	"	38.2	14.0	14.2	18.8	95.4
6½ " " Ice "	"	37.5	16.6	13.8	18.8	93.8
3½ " " " "	"	37.6	13.8	14.0	18.8	94.3
6½ " " Mech. "	I. W. Steinhoff	37.2	14.0	14.1	18.0	93.3
3½ " " " "	"	37.3	14.1	14.1	18.1	93.8
6½ " " Ice "	"	36.5	14.8	14.1	18.2	93.0
3½ " " " "	"	37.8	14.0	14.1	17.9	92.9
6½ " " " "	Av. all scores	37.0	13.8	14.0	18.5	93.4
3½ " " " "	"	37.2	13.8	14.0	18.3	93.6
6½ " " Mech. "	"	37.7	14.1	14.3	18.4	94.6
3½ " " " "	"	37.8	14.0	14.2	18.4	94.6

Conclusions.

1. There was little or no difference in the yield of cheese whether $6\frac{1}{2}$ oz. rennet or $3\frac{1}{2}$ oz. of rennet per 1,000 pounds of milk were used.
2. The cheese ripened in mechanical storage lost about one per cent. more in shrinkage during one month than did those ripened in ice storage. The shrinkage was practically the same with the large and normal amounts of rennet.
3. There was little or no difference in the quality of the cheese whether a large or normal amount of rennet was used.
4. The cheese averaged slightly better in quality from those lots ripened in mechanical cold storage, but lost more in weight as compared with ripening in an ice storage.
5. In cases where cheesemakers wish the cheese to ripen more rapidly than usual, after placing in cold-storage, an excessive amount of rennet may be safely used, although it is not likely to produce any more cheese nor make any better quality of cheese.

PLACING CHEESE ON SHELVES *vs.* BOXING DIRECTLY FROM THE PRESS.

This is a continuation of last year's experiments on this question. Its practical bearing lies in the direction of reducing the labor involved when moving cheese from the ordinary curing-room to a consolidated curing-room or cold-storage. If the cheese may be boxed at the factory and be allowed to remain in the boxes after reaching the cold storage it means a great reduction in labor and expense.

Between June 23rd and July 6th, four lots were ripened in mechanical cold-storage and five lots in an ice storage. Altogether, 12,626 pounds of milk testing an average of 3.58 per cent. fat, were used for the experiments. The average amount used for each test was 1,400 pounds milk. After salting, the curd was divided into two equal parts as nearly as possible, and two cheese were made ranging in weight from 62 to 69 pounds each. One cheese was placed on the shelf in the cold storage, and the other was placed directly into a cheese box.

Those placed on the shelf in mechanical storage lost during one month 2.8 per cent. Those in boxes lost 2.4 per cent. in the same time. In the ice storage the loss was 2.1 and 1.2 per cent. respectively.

• TABLE SHOWING QUALITY OF CHEESE PLACED ON SHELVES AND IN BOXES.

Kind of Cheese and method of ripening.	Scorer.	Average score of the Cheese.				
		Flavor. Max. 40.	Closeness. M. 15.	Color. M. 15.	Texture. M. 20.	Total. M 100.
Ripened on shelf in M.S..	Dairy.	38	14.5	15	19	96.5
" in box " " ..	"	38	14.5	15	19	96.5
" " in ice...	"	37.8	15.0	15	18.2	96.0
" on shelf " " ..	"	37.4	15.0	15	18.0	95.4
" " " " " ..	Mr. Steinhoff.	36.2	14.5	14.3	16.0	91.1
" in box " " ..	"	37.1	14.5	14.3	16.2	92.2
" " " M.S. " "	"	37.3	14.5	14.5	16.3	92.7
" on shelf " " ..	"	37.5	14.5	14.5	16.6	93.1

Conclusions.

1. The cheese on the shelves in mechanical cold storage at 40 degrees F. lost nearly one-half per cent. more in weight during one month than did those in boxes. The loss in the ice storage was nearly one per cent. less than in the mechanical storage, and was about one per cent. less on the cheese in the boxes than for those on the shelves.
2. There was not much difference in the quality of the cheese whether ripened on the shelf or in a dry, clean box. The cheese, however, tend to mould much worse in the box, especially in the ice storage.
3. It appears to be quite practicable to place green cheese into boxes without turning them, and placing them in cold-storage until ready to ship.

EFFECT OF FIVE DIFFERENT TEMPERATURES ON CHEESE RIPENING.

These experiments are a continuation of the work done in 1903. Six tests were made during August and September. The total quantity of milk used was 9,827 lbs., or an average of 1,637 lbs., testing 3.8 per cent. fat, for each experiment. After handling the milk and curd in the usual way, the curd was divided among five hoops after salting, having as nearly as possible the same weight of curd in each hoop. The weight of the green cheese was about 30 lbs. each. The five green cheese were then marked and placed in rooms at five different temperatures. We aimed to have these about as follows: ice and mechanical cold-storage at 40 degrees F., mechanical storage at 28 degrees and 50 degrees, and a room in the basement or cellar of the farm dairy at about 55 degrees F.

The cheese were weighed when placed in the different rooms, and again at the end of one month. They were judged on November 11, and again by Mr. Steinhoff on December 10th.

The table is a summary of the main points in the experiments.

Cheese.	Method of ripening.	Av. Temp.	Av. % moisture in room.	% lost during one month.	Average quality of the Cheese.				
					Flavor. Max. 40.	Closetness. Max. 15.	Color. Max. 15.	Texture. Max. 20.	Total. Max. 100.
"A.".....	Ice Storage.	41.2	87	2.9	38	14	14.3	19	95.3
"B.".....	Mech. "	39.3	77.7	2.7	38	14.8	15	19	96.6
"C.".....	Mech. "	42	78.2	3.4	38.1	14.3	14.5	19	96
"D.".....	Mech. "	31.7	80	2.7	38	14.8	14.6	19	96.5
"E.".....	Cellar "	51.4	83	4.1	37.6	14	14.5	18.5	94.6
I. W. Steinhoff's Scores.									
A....					36.1	14	14.08	17.4	91.6
B....					36.5	14.08	14	17.4	92.08
C....					36.8	16.1	14	17.1	92.1
D....					37	14	14	17	92
E....					37	14.2	14	17.2	92.5

Conclusions.

1. The higher the temperature of ripening the greater the loss in shrinkage. The loss in the cellar storage at about 51 degrees was from one to one-and-a-half per cent. greater than on those cheese ripened in cold-storage at 40 degrees or below.

2. There is not much difference in the quality of the cheese. Mr. Steinhoff scored those ripened at about 51 degrees slightly higher, chiefly because they had more of the "cheese flavor." The extreme difference in the averages of the total scores of the cheese ripened at the five temperatures is less than one point as given by Mr. Steinhoff. Averaging the two scorings, the cheese ripened in mechanical storage at 40 degrees F. are slightly higher. Here again the extreme difference in quality is represented by less than one point. This was true also in 1903. We may therefore conclude that of the five temperatures for which experiments have been made for two years, there is little difference in the quality of the cheese, though the shrinkage is greater at 50 to 55 degrees than at 40 degrees. However, it will cost more to maintain a temperature of 40 degrees than of 50 to 55 degrees F., hence it would seem that the latter is a very favorable temperature at which cheese may be ripened.

RIPENING CHEESE IN ICE AND MECHANICAL COLD-STORAGE.

Cheese moved from Ordinary Ripening room to Cold-storage at end of one week.

This is a continuation of the work done last year, with this difference, the lot ripened for the full period in the ordinary ripening room was dropped out, and moving the cheese at the end of one week to mechanical storage was substituted. As it had been demonstrated in previous years that the cheese ripened in the ordinary room was inferior in quality to those ripened in cold-storage, it was not considered necessary to continue this portion of the experiment.

From June 9th to Sept. 26th, thirteen lots of cheese were made. Altogether there were used 22,942 lbs. milk testing an average of 3.6 per cent. fat. A vat of milk, averaging 1,639 lbs., was handled in the usual way until the curd was ready for hooping. It was then divided into five cheese weighing about 30 lbs. each.

The chief points in manufacture were: the acidity of the milk at the time of adding the rennet was about .2; the temperature for cooking the curds 100 degrees F.; the average per centages of acidity at dipping, milling, and salting were respectively .201, .797 and 1.07; the rate of salting was 2½ pounds per 100 lbs., curds; the curds were put to press at temperatures ranging from 80 to 85 degrees F.; the curds were pressed in an ordinary gang press for about twenty hours, when they were taken from the hoops, weighed, and marked before placing in the ripening rooms.

Two of the cheese were placed in the ordinary ripening room where the temperature averaged about 65 to 70 degrees F. At the end of one week, one of the cheese was moved to an ice storage where the temperature was about 40 degrees F., and the other was placed in mechanical storage where the temperature was also about 40 degrees F. The other three cheese were placed directly from the hoops in cold-storage—one in an ice storage at 40 degrees F., one in mechanical storage at 40 degrees F. and the other in mechanical storage at about 42 degrees F. The cheese were scored about once a month during the season. The last score was made by Mr. Steinhoff, of Stratford, on December 10th, 1904. Our ice storage is on the Hanrahan system, where the cold air circulates from the ice to the storage without having to move the ice. The mechanical storage is the Linde circulating cold air system, using ammonia as the refrigerating agent.

The chief object of the experiment was to note whether or not cheese may be safely left in an ordinary room for one week before moving them to ice or mechanical cold-storage or "cool-curing rooms." If cheese may be allowed

the churning of sweet cream containing 20 to 30 per cent. of pure butter culture compared with the ripening of cream; the churning of sweet cream with and without a butter culture; the use of dry and wet parchment paper for lining butter boxes and wrapping pound prints; ice and mechanical cold storage for butter; preservatives in butter; and a comparative test of eight hand cream separators.

All but the last two experiments are here reported upon in more or less detail. The results of the tests with various preservatives other than salt, and compared with salt, will be reported in a special bulletin by the Dairy and Chemical departments early in 1905. We have not sufficient data as yet with reference to the hand separators. Nearly all the machines did very good work under the conditions of the tests made. A dairyman would make no serious mistake in purchasing any one of the leading makes of separators. It is largely a question of price, capacity, and individual preference.

The samples of butter in all cases were judged on the basis of the following scale: Flavor 45; Grain 25; Color 15; Salting 10; Package 5; Total 100.

PASTEURIZING MILK *vs.* PASTEURIZING CREAM.

During the month of August four trials of pasteurizing milk were made to compare with the pasteurization of cream. About three thousand pounds of milk were mixed in a vat. One-half of the milk was pasteurized at 180 to 190 degrees F., before separating. The other half of the milk was heated to about 90 degrees before separating, and the cream was afterwards pasteurized at 180 degrees to 190 degrees F. The order of pasteurizing the milk and cream was reversed for each experiment, i.e., if the milk were pasteurized first one time, the cream was pasteurized first next time in order to overcome any differences there might be as a result of holding the milk in the vat.

Both boxes and pound prints of butter were made in each experiment, and placed in storage at about 40 degrees F. The samples were scored about once a month until November 26th, when the last scoring was made. The average of all scores for flavor was 36.7 for the lots made from pasteurized whole milk and 36.4 for the pasteurized cream. The total scores averaged 91.5 and 90.4 respectively.

Conclusions.

The experiments are not sufficient in number to warrant us in drawing hard and fast conclusions, but they point to the fact that when first made there is little or no difference in the quality of the butter in summer whether the whole milk or cream be pasteurized, but that the butter holds its flavor slightly better when made from pasteurized milk as compared with pasteurized cream. However, the extra labor involved in cleaning the separator bowl when separating pasteurized milk probably counterbalances any difference in quality. By using "exhaust" steam for pasteurizing the skim-milk the cost of pasteurization is not very great.

SWEET CREAM WITH CULTURE *vs.* RIPENED CREAM.

Four trials were made during July and August comparing the churning of cream immediately after separating, pasteurizing, and cooling, with churning from the same vat after ripening in the usual way. The cream was thoroughly mixed in the cream vat; then one-half averaging 35½ lbs. each churning, was put in a combined churn and worker, an average of butter culture was added and the cream was churned immediately at a temperature of 54.2 degrees F. The average time re-

quired to churn was 17 minutes. The percentage of fat in the buttermilk averaged .6. The yield of butter was 126.6 pounds per churning. The butter scored an average of 39.5 points (max. 45) for flavor and a total of 94.3 points. The samples in all cases were scored about once a month until the end of November.

The ripened cream (351½ lbs.) had 56 per cent. of acid when churned at an average temperature of 50.5 degrees. The time required to churn was 23½ minutes, and the percentage of fat in the buttermilk averaged .28. The yield of butter averaged 127.6 pounds. The average scores for flavor and total were 36.8 and 91.8.

The total yield of butter from the sweet cream for the four churnings was 506.7 pounds and for the ripened cream it was 510.6 or 4 pounds more.

Three lots of this butter made July 21, August 23 and 24 were sent to Montreal in November for scoring by experts in the trade, and by Mr. Woodard, "Official Referee." In addition, two boxes made in April, which had been kept in cold-storage at 40 degrees F., and which had been scored by Mr. Woodard soon after making, were also sent. Mr. Woodard scored the sweet cream butter made in April, when fresh, 42 out of 45 for flavor, and a total of 94 points. The butter made from ripened cream scored when fresh 41.5 for flavor and 93.5 for total. On November 2nd these two lots were again scored by Mr. Woodard, when they received 35 and 20 points respectively for flavor in the sweet and ripened cream boxes.

The average of five scores of the July and August butter made on November 2nd by Messrs. Woodard, Vaillancourt, Olive, Ayer, and Le Clair was 40.6 for the sweet cream and 34.9 out of 45 for the ripened cream. All three lots made from the ripened cream were pronounced "fishy".

Conclusions.

1. The yield of butter was slightly less by churning the cream sweet.
2. The loss of fat in the buttermilk was greater from the sweet cream.
3. The time required for churning the sweet cream averaged six minutes less than that for the ripened cream, though this may be accounted for by the fact that the churning temperature averaged four degrees higher.
4. The quality of the butter was superior from the sweet cream with culture, not only when first made but it also held its flavor better. The average of the first scores for flavor was 42 for sweet cream and 40.7 for the ripened cream. At the final scoring at the Dairy in November the sweet cream lots averaged 36.7 points and the ripened cream 32 points. The sweet cream lots lost an average of 5.3 points, while the ripened cream lost 8.7 points in flavor. There was a similar difference made by the experts in Montreal in favor of the sweet cream butter to which culture had been added at the time of churning.

CHURNING SWEET CREAM *vs.* SWEET CREAM WITH CULTURE ADDED.

The object of this experiment was to compare churning sweet cream directly after separating, pasteurizing and cooling with similar cream to which from 20 to 30 per cent. of culture was added before churning.

The tests were made in August, and the last scoring of the butter was made November 26th. The sweet cream with culture was churned at an average temperature of 53 degrees F. and took 17½ minutes to churn. The buttermilk averaged .35 per cent. fat. The sweet cream without culture was churned at an average temperature of 47½ degrees F. in 14 minutes, with an average of .55 per cent. fat in the buttermilk.

The average score of the butter made from sweet cream was 40.5 out of 45 for flavor and 94.8 total, out of 100. The butter from sweet cream without culture scored 39.5 and 93.8 respectively for flavor and total.

Conclusions.

1. The sweet cream without culture churned at a lower temperature, in less time and with a greater loss of fat in the buttermilk than did the sweet cream with culture.

2. The flavor of the butter was slightly better as a result of adding the culture.

DRY vs. MOIST PARCHMENT PAPER FOR BUTTER.

Several tests were made during the season to determine whether or not it is advisable to line butter boxes and wrap pound prints of butter with dry paper rather than use moist or wet paper. So far as we could judge there was no advantage in using the dry paper. The butter did not keep any better, and it is more difficult to make a neat package with the dry paper as compared with the wet paper. However, those who are accustomed to the use of dry paper consider that it can be used as conveniently and neatly as the wet, and you are saved the labor of wetting the paper.

In any case it is important to use pure water for wetting the paper as there is danger of contamination by using impure water. Paper for lining boxes are best soaked in brine before using. The value of formalin as a preventive of mould on butter is doubtful.

COLD-STORAGE FOR BUTTER.

These tests are a continuation of the work done in 1903. The object was to compare ice and mechanical cold-storage for butter and also to note the effect of storing butter in a moderately cold room (40 degrees F.) for one week before placing at a lower temperature (28 degrees F.)

The ice cold-storage averaged about 40 degrees F.; one room in the mechanical storage was about the same temperature, and the other room averaged about 28 degrees F.

The butter was made in July. It was scored four times between the date of making and November 26th. The butter in ice storage averaged 35.7 points out of 45 for flavor and a total of 90.5 out of 100. Similar butter placed in mechanical storage at 40 degrees F. averaged 36.2 for flavor and 91.1 for total. The butter placed in mechanical cold-storage at 40 degrees F. for one week then moved to mechanical storage at 28 degrees F. averaged 35.7 and 90.6 respectively, while that placed directly in mechanical storage at 28 degrees F. scored an average of 37.2 and 92.1.

The average of all the lots in mechanical storage was 36.3 for flavor and a total of 91.2, which is slightly above the average scores for the butter in ice storage. There was little difference in the quality of the lots at the first scoring which was done about one month after the butter was made.

Conclusions.

1. Mechanical cold-storage at about 40 degrees F. gave slightly better results than ice storage at the same temperature.

2. Better results were got by placing the butter as soon as made into mechanical storage at 28 degrees, than by allowing the butter to remain for one week at the higher temperature (40 degrees F.) before placing at the low temperature.

3. A temperature of 28 degrees F. gave better results than the higher temperature of 40 degrees F. These results agree with those got in 1903.

4. None of the July butter was suitable for table use when examined at the end of November. It does not seem possible to hold butter in cold stor-

age for three or four months and have it retain its fine flavor. The use of preservatives, other than salt, assist in preventing butter in cold-storage going off in flavor.

BLATCHFORD'S SUGAR AND FLAXSEED FOR COWS AND CALVES.

We receive a great many requests to test various stock foods which are now on the market. Our answer is that we shall take pleasure in testing these on two conditions: 1. That the parties wishing the tests made shall supply the material free of cost to us. 2. That the results, whether favorable or not, shall be published for the benefit of farmers. Some firms are willing to comply with these conditions and some are not.

The proprietors of "Blatchford's Meal" agreed to the conditions named, and a test in February and March was made with both cows and calves. I cannot do better than quote a letter written to J. W. Barwell, Waukegan, Ill., U. S. A., who courteously sent the meal to us for testing, and offered suggestions as to methods of conducting the test.

"DEAR SIR,—Replying to yours of the 15th regarding Blatchford's Sugar and Flaxseed Meal, would say that we have now completed the experiments, and are able to give you the results which are as follows: Four comparatively fresh cows were given Blatchford's Meal according to directions in addition to our regular meal ration for the first ten days in February; the average daily yield per cow was 26.7 pounds of milk. For the next ten days Blatchford's meal was withdrawn and the average daily yield was 26.6 pounds. For the remaining nine days in February Blatchford's meal was given added to the meal ration of these same cows, when the average yield was 27.5 pounds.

"As you will see by the figures given, there was a slight increase in the yield of milk when the Sugar and Flaxseed meal was fed, but not sufficient to pay for the cost of the meal.

"Beginning March 1st, one new cow more advanced in lactation, and one of the four which had been milking somewhat longer than the others was fed for ten days on the B. M. in addition to the regular meal ration and the average daily milk yield was 23.6 pounds. For the next ten days without the B. M. the average daily yield was 21.3 pounds.

"Summing up both of the experiments we may say that so far as these results go they do not indicate any particular effect on the milk yield. There was a slight increase in the average daily milk production, but not sufficient to warrant the additional expense.

"In the calf feeding experiment, two calves which were all we had available at the time, were fed for three weeks, beginning March 11th on our regular ration to which was added two handfuls of B. M. One of the calves gained 60 pounds and the other gained 39 pounds in the three weeks. The following three weeks without the B. M., the one gained 40 pounds and the other 31 pounds. The net gain in the three weeks of the two calves fed on Blatchford's Meal in addition to the regular ration was 28 pounds more than the gain in weight when the B. M. was not given. This appears to be a very good showing in favor of your meal, and indicates that it is likely to be a very good food for calves."

IMPROVED MOLASSES CATTLE FOOD FOR MILK COWS.

At the request of the Dresden Sugar Beet Co., of Dresden, Ontario, who kindly supplied the meal to us free of cost, we conducted a series of experiments during February, March and April to note the results of feeding to cows in milk their "Improved Molasses Cattle Food", a by-product from the Sugar Beet factory.

During the first half of February when 21 cows were receiving their regular meal ration of 4 lbs. bran, 3 lbs. oats and 1 lb. oilcake in addition to hay, roots, and corn silage, they produced 5,146 lbs. milk containing an average of 3.78 per cent. fat, or 194.51 lbs. fat. During the second half of the month the same cows, for which half the ordinary meal had been replaced by the Cattle Food produced 4,989 lbs. milk, testing an average of 3.62 per cent. fat, and 180.6 lbs. fat. The 21 cows gave 157 lbs. less milk and 13.94 lbs less fat during the second half of the month when half their regular meal ration was replaced with the Cattle Food. This, however, might be due to advanced lactation.

The cows were continued on the Cattle Food as half their meal ration during the month of March and the flow was well maintained, the average per cow being slightly better than for February.

In the middle of April, thirteen of the cows which had been receiving Cattle Food for the previous two months were put on their regular meal ration of 8 lbs., bran, oats and oil-cake. Five were continued on the Cattle Food to the end of the month.

During the first 15 days of April the 13 cows gave 3,691 lbs. milk, or an average of 284 lbs. of milk per cow. During the second half of the month the same cows gave 3,517 lbs. milk, or an average of 270 lbs. milk per cow when fed on their regular meal ration.

The five cows which were continued through the month on the Cattle Food as half their meal ration gave 1,172 lbs. milk or an average of 234 lbs. per cow during the first 15 days of April. During the second half of the month they gave 1,131 lbs. milk or an average of 226 lbs. per cow. The average shrinkage per cow, on those changed from bran, oats, oil-cake, and Cattle Food to bran, oats, and oilcake without the Cattle Food was 14 lbs. in two weeks. The average shrinkage on those continued on the Cattle Food was 8 lbs. per cow in two weeks.

Conclusions.

We cannot do better than quote the concluding paragraph of the report sent to the manager of the Dresden Sugar Beet Co.: "On the whole we are well pleased with the results and think that the "Cattle Food" will be a valuable addition to the foods available for dairymen in the production of milk."

We understand that the "Food" can be sold for about \$15 per ton. It appears to have a feeding value about equal to bran and oats. Ground oats usually cost about one cent. per pound or \$20 per ton. Bran costs from \$14 to \$18 per ton. Compared with these foods, if this by-product of the sugar beet factory can be sold for the price named it should prove an economical milk producer for our dairy farmers.

Last year we reported on an experiment with the beet pulp as a substitute food for mangels in feeding cows. One of the conclusions drawn was, "In those districts where beet pulp can be got fresh from the factory, or if it be stored in a silo, it may well be used as a substitute for roots in the ration for cows giving milk."

DAIRY HERD.

The herd on December 31st, 1904, consisted of: 9 Holstein cows, 2 heifers, 4 heifer calves and 1 bull calf; 3 Ayrshire cows and 2 heifers; 4 Jersey cows, 1 heifer and 1 bull calf; 5 Grade Holstein cows; 1 Grade Jersey cow; 4 Grade Ayrshire cows, and 2 Grade Holstein heifers, making a total of 39 head.

As usual we have weighed each cow's milk morning and evening, and have taken composite samples for testing for fat. In addition, we have kept account of the feed. Not all the feed has been weighed, but this has been done frequently enough to know quite closely what each cow has consumed. A sheet showing the amounts of the different kinds of feed consumed by each cow was handed into the office monthly by the herdsman. The feed was charged at the following prices: Straw \$2 per ton; hay \$6 per ton; corn silage \$1.50 per ton; mangels 7 cents per bushel of 60 pounds; bran \$16 per ton; oats \$20 per ton; oil-cake \$28 per ton, and pasture at \$5 per cow for the season.

Most of the milk produced by the herd is sold at four cents per quart to the College, Macdonald Hall, and to customers who come to the dairy for the milk. In calculating profit on milk we have credited the cows at the rate of \$1.60 per 100 lbs. which is practically four cents per quart. The profit on milk-fat is based on the prices paid to patrons of the College Creamery during the past year, viz., 25 cents per pound fat for the months of January, February, March, and December, and 20 cents per pound of fat for the remaining eight months of the year.

The table shows the main points in the record of each cow for the past year. The rank of the cows has been arranged according to the quantity of milk given, although they might have been arranged according to yield of butter, profit on butter, or profit on milk over the cost of feed. No attempt has been given to charge the labor to the cows. Under ordinary circumstances the value of the manure and skim-milk would pay for the cost of the labor. Neither have the cows been credited with any value for offspring.

Rank.	Name or No. of cow.	Age—years.	Breed.	Live Weight.	No. of days milking.	Lbs. Milk.	Av. % fat.	Lbs. fat in milk.	Lbs. butter.	Value fat.	Value milk.	Cost of feed.	Profit on—	
													Fat.	Milk.
1	Dolly, 17.....	8	Gr. Holstein...	1486	296	9161	3.5	327.05	381.55	68.15	146.57	28.80	39.35	117.77
2	Mercena, 38....	7	Holstein.....	1158	289	8634	3.4	298.	347.7	64.88	138.14	32.23	32.15	105.91
3	Mary C., 15.....	7	".....	1347	311	7677	3.2	249.5	291.1	54.70	122.83	30.11	24.59	92.72
4	Daisy of R., 41..	7	".....	1010	226	7580	3.	225.7	263.3	50.38	121.28	23.75	26.63	97.53
5	Molly, 21.....	8	Gr. Holstein...	1325	250	7156	3.6	262.3	306.1	56.47	114.49	27.30	29.17	87.19
6	Beauty of N., 67	10	Holstein.....	1100	280	7139	3.5	250.6	292.3	55.78	114.22	30.86	24.92	83.36
7	Abby M., 56.....	3	".....	1278	293	6725	4.1	277.	323.2	61.35	107.60	29.97	31.38	77.63
8	Lilly, 26.....	6	Jersey.....	822	353	6414	4.3	276.1	322.1	59.74	102.65	23.08	36.66	79.57
9	Molly De K., 76	3	Holstein.....	1160	273	6217	3.4	213.1	248.6	46.34	99.47	28.51	17.88	70.96
10	Lady Nancy, 66	4	Ayrshire.....	967	366	6035	4.2	258.5	301.6	56.12	96.56	26.01	30.11	70.55
11	".....20.....	4	Grade.....	1160	201	5768	3.3	193.3	225.57	41.04	92.28	19.58	21.51	72.75
12	Lady S., 61.....	3	Gr. Holstein...	1225	259	5626	3.3	186.8	217.9	40.24	90.01	24.56	15.68	65.45
13	Jean III., 28....	5	Gr. Ayrshire...	1118	215	5179	3.7	193.8	226.1	39.16	82.86	19.50	19.66	63.36
14	Marg. II., 79....	4	Holstein.....	1176	262	4672	3.3	154.1	179.8	33.73	74.75	26.89	6.84	47.86
15	Rena, 70.....	3	Cross-bred A.-J.	837	236	4025	4.9	199.2	232.4	40.84	64.40	18.85	21.99	45.55
16	Emerald R., 54	7	Jersey.....	950	233	3960	4.	159.9	186.5	35.05	63.36	16.47	18.58	46.89
17	Lady R., 78.....	2	Holstein.....	969	161	3928	3.2	129.6	151.2	28.55	62.84	21.56	6.99	41.28
18	Florence, 44....	4	Gr. Ayrshire...	1135	209	3902	3.5	136.6	159.3	28.47	62.43	21.54	6.98	40.89
19	Daisy D., 72....	2	Holstein.....	1000	239	3802	3.6	138.7	161.8	28.45	60.83	19.13	9.32	41.70
20	Lucy, 2.....	2	Gr. Holstein...	1197	290	3779	3.7	142.3	166.1	30.94	60.46	22.39	8.55	38.07
21	Lucy II., 71.....	2	".....	895	162	3559	3.3	117.3	136.8	24.81	56.94	20.09	4.72	36.85
22	Jean IV., 82....	2	Gr. Ayrshire...	811	236	3472	4.3	150.1	175.2	30.62	55.55	16.82	13.80	38.73
23	Glen Bessie, 65.	4	Ayrshire.....	1065	178	2596	3.9	102.9	120.1	21.66	47.58	20.67	.99	26.86
24	Lilac, 75.....	2	Jersey.....	800	204	2515	4.4	111.5	130.1	24.12	40.24	17.83	6.29	22.41

COMMENTS ON HERD RECORD.

1. As was the case last year, the cow standing at the head of the herd in quantity of milk and butter, and also in profit on milk and butter is a grade Holstein of our own breeding. The cow that was at the head last year has dropped to fifth place this year. The Holsteins are again strong in the lead. One Jersey cow is eighth on the list in quantity of milk, fourth for butter production and second for profit on butter, over cost of feed.

2. Two cows gave yields of over 8,000 lbs. milk, four produced over 7,000 lbs. milk and ten over 6,000 lbs. milk. A larger number than usual in our

herd are heifers with first calf. Some of the cows ought to have made a better record, and unless they produce a larger quantity in 1905, they will be disposed of and their places given to better cows, if they can be got at a reasonable price.

3. The value of the milk from individual cows ranged from \$146.57 to \$40.24. The value of the milk fat ranged from \$68.15 to \$21.66. The profit on the milk varied from \$117.77 to \$22.41. The profit on the milk fat (butter) varied from \$39.35 to 99 cents.

4. After production reaches a certain point the cost of feed to produce an increase of 1,000 lbs. milk or 40 to 50 pounds of butter is very much greater. It is a very interesting study to find out how much milk or butter can be *profitably* got from a cow. This requires considerable skill on the part of the feeder. If we were aiming at large records *regardless of cost*, the foregoing records could be increased considerably.

As in former years, we are indebted to the Farm department for pasture, hay, silage, roots, and straw for bedding for our cows.

All of which is respectfully submitted,

H. H. DEAN.

PART IX.

THE PROFESSOR OF ANIMAL HUSBANDRY AND FARM SUPERINTENDENT.

To the President of the Ontario Agricultural College :

SIR,—I have the honor to submit herewith my twelfth annual report.

In my last report I suggested the advisability of making a change in my department. With the opening of the College year this change was put into effect, and my department has been relieved of the lectures in Agronomy. This arrangement, I am sure, will work to the best interests of the students, as it will place all lectures in those departments which are especially equipped for doing the work. In my own department, I still have all the work in Animal Husbandry, the Farm Superintendence, and the experiments in live stock, which is quite sufficient for one department.

During the month of January we held our Short Course in Stock Judging, and I am pleased to say that great interest was evidenced in this work. In addition to judging various breeds of stock alive, we conducted slaughter tests with cattle, sheep, and swine. This is perhaps one of the most important features of the course, and I believe it is bound to have an important influence in live stock education.

VISIT TO GREAT BRITAIN.

During the past summer, I paid a visit to Great Britain, under instructions from the Minister of Agriculture, mainly for the purposes of purchasing some stock for the College Farm. Most of the selections were made with the assistance of the Minister of Agriculture, and the stock purchased is as follows:

One Shorthorn heifer from J. Deane Willis, Bapton Manor, Wiltshire; two Hereford heifers from John Tudge, Craven Arms, Herefordshire; one yearling Aberdeen Angus bull, and one three-year-old cow with bull calf by her side from W. S. Ferguson, Pictstonhill, Perthshire, Scotland.

Five Border Leicester ewes and one ram from W. S. Ferguson; six Shropshire ewes and one ram from the flocks of Thomas A. Buttar, Coupar-Angus, Scotland, T. S. Minton, Montford Bridge, Salop, and Edward Nock, near Shrewsbury.

The animals, as a whole, are good representatives of the different breeds, and constitute an important acquisition to the College herds and flocks. I feel that the experience gained through this trip will be of great service to me in my College work.

INVESTIGATIONS REGARDING CANADIAN BACON ON THE BRITISH MARKET AND THE PRODUCTION OF BACON IN DENMARK.

While in Great Britain, I made it my business to make certain investigations regarding our bacon on the British market, and, as the Danes are our most formidable competitors, I was especially interested in comparing their product with our own. I also visited Denmark for the purpose of observing the methods of breeding and feeding swine in that country.

One of the most remarkable features of Danish bacon is its great uniformity of excellence, very few really bad sides of bacon being put upon the market. The Danish sides are characterized by a light shoulder, a light neck,

good length, and a large proportion of lean meat. In addition to this, the sides are well trimmed and placed upon the market in a very attractive form. On the other hand, when we come to examine Canadian bacon, we find some excellent sides, some only fair and some very bad indeed. The best Canadian sides possess excellent length and show great uniformity in the thickness of the layer of fat along the back; but, as a rule, they do not possess quite so much lean meat as the Danish sides. In length, however, the best Canadian sides are quite equal, if not superior, to the Danish product. The great fault of our bacon, however is its lack of uniformity. There are far too many short sides, thick shoulders, and heavy necks, which cause the Canadian product, as a whole, to show at a great disadvantage when compared with Danish. Just here a word to Canadian packers may not be out of place. Some of our packers need to take lessons in the art of making goods attractive, and I was extremely sorry to see many good sides of bacon so badly trimmed that their value was greatly lessened. From this it would seem that there is need of education among the packers as well as among the feeders and breeders of bacon hogs. As to the London commission merchants, they appear to have a very friendly sentiment towards Canada, and appear anxious to handle our bacon; but, of course, it must be of good quality before they can handle it to advantage. I was pleased to hear them speak in very high terms of our best bacon.

The study of the competition in the Smithfield market gives rise to several important questions in the mind of the person interested in this matter. Among these are the following:

1. How do the Danes maintain this uniformity in their product?
2. How do they produce such lean bacon?
3. To what extent can they increase their output?
4. Can we hope to compete successfully with them?

It was with these questions before me that I sailed in a Danish steamer from Harwich on the east coast of England, and landed in Esbjerg, on the west coast of Denmark, one fine morning in July. For a person not familiar with the Danish language, it is no easy matter to collect information, though one who knows what he wants can take in a good deal through his eyes in spite of the fact that his ears are of comparatively little use. However, through the aid of interpreters, I was able to pick up a few points here and there which are not without value.

The question regarding uniformity is very easily answered. One has only to look over the hogs of the country and the methods of marketing to understand very thoroughly how it comes that Danish sides of bacon resemble one another very closely. There are three classes of hogs in Denmark. First, there is what is called the "Danish hog". In color, bone, and general conformation of body it strongly resembles the Yorkshire, though perhaps the shoulder is nearer to that of the Tamworth. The neck is light, the jaw is also light, and the snout long and somewhat coarse, while the ears are large, thick, and drooping. It is claimed for this hog that it is more vigorous and an easier feeder than the Yorkshire. Next, we find the large Yorkshire, which is imported from England, bred pure at certain centres, and used for crossing on the native pigs. The breeders of Yorkshires agree with the government to keep nothing but pure bred Yorkshires on their farms, and in return for this they receive some financial aid from the government to help defray the expenses of importing. The third class is the market hog, or the cross between the Yorkshire and the Danish type. It is claimed that the cross-bred pigs made a better quality of bacon than either the pure Danish or Yorkshire, and the animals which I saw were certainly of a very desirable type. Of course, a certain number of pure Yorkshire and pure Danish hogs find their

way to market, but the great bulk of Danish bacon comes from the cross-breeds as already described.

Another important point in connection with securing uniformity, is the method of marketing. The most important factories of the country are co-operative concerns. They are located comparatively close to one another and practically every farmer markets his own hogs. Each man's hogs are slaughtered separately, and after they are slaughtered they are graded, and he is paid for his hogs according to the quality of the bacon they produce. Of course, this means a great deal of work at the factory, but it seems that the results more than compensate for the extra labor. When we remember, therefore, that the Danes do not have the great variety of types of hogs that we have, and that strict account is kept of the quality of each farmer's hogs when he markets them, it is very easy to understand how they maintain such a high degree of excellence in their bacon.

The second question is not so easy to answer, though the foods used are, as a rule, conducive to producing a large proportion of lean meat. It will be remembered that Denmark is a butter-making country, and that practically every farmer who raises hogs also keeps cows and feeds the skim-milk to his hogs. There is, as a rule, a fixed relation between the number of hogs fed, and the number of cows kept. Because grain is dear, and because skim-milk is a by-product and consequently cheaper than almost any other food at the farmer's disposal, there is little encouragement for the farmer to feed more hogs than his supply of skim-milk would warrant. In addition to skim-milk, barley, is largely fed, though other grains are sometimes used, and in some districts corn is used to a considerable extent. The use of corn, however, is looked upon with disfavor by the packer, and I understand that less corn is fed at the present time than was fed a few years ago. It is quite probable that the breeding of the hogs, has something to do with the amount of lean meat, and the breeding, combined with the feeding of skim-milk probably constitute the answer to the second question. It is a noticeable fact, however, that the market hogs are allowed very little exercise. In fact, about the only hogs that are allowed any exercise worth speaking of are the breeding sows, which are given the run of small lots. Land is too valuable to allow of pasturing, and a hurried trip through the country might give one the impression that there was not a hog in it. Judging from Danish methods, therefore, we may conclude that it is possible to produce a first-class article of bacon without any considerable amount of exercise, a fact which is borne out by our own experiments.

The question regarding the possible increase in the output of Danish bacon is one which does not admit of a definite answer. One can judge merely by what he sees, and by certain indications in connection with this industry in Denmark. One thing which is very suggestive is the fact that there are a number of factories in Denmark at the present time which have been forced to close their doors, and others are running at a loss, not being able to obtain enough hogs to make their operations profitable. At the time of my visit, the farmers were receiving about six and a half cents per pound live weight for their hogs, and they were complaining very bitterly that the price was too low to admit of profit to the feeder. When the price declines to the neighborhood of six cents, the tendency is for the farmers to curtail their operations in feeding hogs, and the best authorities I could find, estimated the cost of producing bacon in Denmark to be six cents per pound live weight. Taking this fact in connection with the insufficiency of hogs to support all the factories, we would naturally infer that it is not likely the Danes will expand their output to any great extent. As stated before, there is a relation between the amount of skim-milk produced upon a farm and the number of hogs fattened. This fact

tends to act as a check upon the expansion of the business of producing bacon hogs; and as soon as the price declines, feeding operations are naturally curtailed, as previously stated. If it were not for the fact that Danish bacon sells for a higher price on the English market than our product, we would certainly be able to drive them out of the field. As it is, we have a very great advantage in being able to feed hogs very much cheaper than they can, and, therefore, we can undersell them on the British market and make a very fair profit. At the same time, there is great need of our watching very carefully the quality of our bacon, because it is much easier to lose a reputation than to gain one.

From what has been said in the previous paragraphs, it will be seen that we have a good fighting chance on the British market, provided we do not lose sight of the question of quality. Though it is true that the British commission merchants entertain a friendly sentiment towards Canadians, yet sentiment will not serve as a substitute for quality in the goods we send forward. When it comes to a matter of catering to the tastes of the public, sentiment is a very small factor in the enterprise. If the goods are not right, the consumer will look elsewhere, and, though he is ever so willing to purchase Canadian goods, he will not do so unless they are what he requires. We can undersell the Danes on the British market; but, at the same time, if we would only produce an article of equal merit, we would be able to obtain as high a price as they obtain at the present time, and this would mean a very large additional profit to us. Those who wilfully close their eyes to the importance of producing hogs of the right type and quality, are acting as a severe handicap upon our trade in Great Britain. They fail to see that, in the long run, they are the losers. There has been, it is true, a marked improvement in the quality of our bacon during the last few years; but much remains to be done before our product, on the whole, equals that of Denmark, and whether we hold our own in the British market depends for the greater part upon the farmers of this country. I believe that if we make up our minds to produce bacon equal to that of any other country, we can do so, and it remains to be seen whether the farmers of this country will rise equal to the occasion or not. An increase in the value of our bacon of 3 or 4 shillings per hundred weight would mean a very substantial profit to our farmers. It is quite possible for us to secure this additional price if we make up our minds to that effect, and it seems strange that so many farmers cannot look at this side of the question.

There still remains a great deal to be done in the way of spreading information among our farmers regarding this important industry.

FARM SUPERINTENDENCE.

The past summer was abnormally wet, especially during harvest. As a result, a number of our crops were seriously injured, and the yields are consequently not so good as we were led to expect by the promise earlier in the season. Following are a few notes on some of the principal crops grown during the year:

MEADOW. We had ninety acres of hay which yielded about two and a half tons per acre. Our method of making hay is the same as described in the report. We still use the side delivery rake and hay loader. As a report, we believe the saving in labor effected by these implements compensates for any slight superiority in the quality of the hay obtained through the old method.

We had 100 acres in oats, 75 acres of which were of the Siberian Star King. The oats followed potatoes, corn, rape, and the preceding fall, the potato and corn ground

was gang-plowed lightly, harrowed thoroughly, and then ribbed up with double mould-board plows. In the spring the ribs were first harrowed, then cultivated, and harrowed again before sowing. The oats were sown with the drill at the rate of one and a half bushels per acre, along with which was sown a mixture of red clover, timothy, and alsike in the proportion of about seven pounds of red clover, three and a half pounds of timothy, and one and a half pounds of alsike. The rape ground was also plowed lightly in the fall and prepared for seeding in the spring by means of the harrow and spring tooth cultivator. Owing to the very wet season, our oats produced too great a growth of straw and lodged very badly, which interfered seriously with harvesting operations. The Tartar King oats did not stand up any better than the Siberian, and for our conditions, I doubt whether they are quite so satisfactory. The average yield, in spite of unfavorable conditions, will be close to 70 bushels per acre.

BARLEY. 30 acres of Mandscheuri barley were sown after roots and sod. The root ground was ribbed up in the fall with a double mould-board plow, and in the spring harrowed and cultivated across the ribs before sowing. For cultivation of sod see method of cultivation for roots. The barley was sown with the drill at the rate of one and one-half bushels per acre. It was sown May 3rd and harvesting commenced August 1st. The yield was about 50 bushels per acre.

MANGELS. We grew 10 acres of the Yellow Intermediate variety. They were sown May 25th with the corn planter on the flat in drills 30 inches apart. The germination was good, and though the field is not first class as regards soil, part of it being very high and gravelly, the yield was nearly 900 bushels per acre.

The mangels followed sod which was plowed about four inches deep when opportunity occurred during the months of July and August. The ground was rolled and harrowed after plowing, and later was thoroughly cultivated with the spring tooth cultivator. Manure was applied on the surface during the winter at the rate of about 15 tons per acre. In the spring, the ground was gang-plowed, harrowed, rolled, and cultivated both ways with the King cultivator with narrow points which loosened the soil to a depth of six or eight inches. Subsequent harrowing and rolling prepared the ground for sowing.

TURNIPS. Owing to the very wet spring, the ground that we had intended for turnips was entirely unfit for the purpose, and was eventually sown with millet, which was cut for hay. The only turnips we grew was a small patch of about two acres on a part of the mangel and potato ground which was too wet at the time these crops were planted. They were sown very late, and consequently gave rather a small yield.

CORN. 30 acres, mostly Wisconsin Earliest White Dent, were planted with a check-row planter in hills 42 inches apart. In spite of the cold, wet season, we had a very fair crop, the 30 acres averaging about 15 tons per acre, though the corn was not so well matured as it should be to give the best quality of silage. The preparation of the soil was practically the same as for mangels.

POTATOES. Of this crop we had about 8 acres of the Empire State variety. The seed potatoes were cut with at least two strong buds on each piece, and dusted with land plaster immediately after cutting. The crop was sprayed several times with Paris Green and Bordeaux mixture. In spite of precautions, however, the rot affected the crop very severely, and the yield was extremely unsatisfactory.

The potatoes followed sod, and the fall cultivation was the same as for mangels, with the exception that the manure was applied in the fall and the ground ribbed up with double mould-board plows after manuring. In the spring, the ribs were harrowed down and the ground gang-plowed and loosened with the King cultivator as in the case of mangels. Before planting, furrows were opened up with double mould-board plow 30 inches apart, and the potatoes were planted 12 inches apart in the rows. The drills were then split so as to cover the potatoes. In planting, care was taken to cover the potatoes as soon as possible after they were planted. In going across the field in one direction, the plow opened up a new furrow; but in coming back it covered the potatoes that had been already planted. Thus the potatoes were exposed for a very short time to the sun. After the ground had settled, it was harrowed first lengthwise of the ribs, and a little later cross-wise, so that by the time the plants appeared the ground was practically level. In addition to making the ground level, the harrow checked the growth of weeds and prevented the formation of a crust on the soil. The ground was also harrowed after the plants were showing above the surface. Subsequent tillage was with the horse-hoe, or scuffler. The last time the scuffler was sent through the potatoes, a little earth was thrown towards the vines by means of small mould-boards. In the case of a large crop, this tends to prevent the tubers from becoming exposed to the sun.

NOTES ON FEEDING STOCK.

As stated in previous reports, our methods of feeding vary according to circumstances. Last winter, we fed no hay whatever to our cattle, except the calves and bulls. This winter we have followed the same plan up to the time of writing (the end of December), but intend to use a little hay mixed with the cut straw during the following months. Calves are fed clover hay and roots, with sometimes a small allowance of silage. They are also fed what they will eat readily of oats and bran, to which we commonly add a small allowance of oil-cake. The bulls also get hay and roots but, as a rule, they are fed no silage. They are also fed a light ration of oats and bran, which is varied in quantity to meet what we consider the requirements of the case. We like to keep our bulls in good condition, especially those of the beef breeds, and we aim to feed with that object in view. Our breeding cows, and the heifers, except calves, are fed a mixture of pulped roots, cut straw, and silage, which is usually mixed a day in advance of feeding. As has already been indicated, hay is usually added to this ration during part of the winter. Cows that are not milking do not receive any meal, unless in exceptional cases. Milking cows and growing stock receive a fairly liberal allowance of ground oats and bran. This winter we are feeding some twelve head of steers which we hope to market during April. They are fed the same mixture of silage, roots, straw, etc., as the cows, and, in addition, a ration of meal from mixed grains. At the present time, oats and barley are the main grains used, but this varies according to what is most readily available. We commenced feeding between four and five pounds of meal per day to each steer during the month of November. At the present time, they are receiving nearly six pounds each per day, and the quantity of meal will be increased probably to nine or ten pounds each per day before the end of the feeding period. The idea is to increase the meal as they become accustomed to it.

Our sheep are fed mainly clover hay and turnips, from 3 to 4 pounds of roots being allowed to each ewe during the earlier part of the winter. This quantity is usually slightly reduced a month before the lambing season. In the case of thin ewes, or when the hay is not of good quality, we usually feed

some oats and bran to our breeding ewes. Lambs are fed some oats and bran, and usually a little oil-cake. After the lambs arrive, the ewes are fed liberally upon roots, oats, and bran in addition to clover hay.

As regards the feeding and management of swine, I would refer readers to Bulletin 129, issued by the Department of Agriculture, Toronto. I might say, however, that we have now arranged matters so that we can manage our swine to better advantage than heretofore. Our breeding sows run in a small outside lot, and at the back of the lot we have placed a small house in which they sleep. This building is 8 feet wide, 16 feet long, 7 feet high in the front, and 3½ feet high at the rear. It has a floor, and the sides and roof are simply single boarded with battens over the cracks. The pen is set facing the south, and in this side is a window to admit light and sunshine, and a small opening near one corner large enough for the sows to go in and out. The opening is never closed, but the sows are given plenty of bedding, and are quite comfortable in the coldest weather. We have had as many as ten sows sleeping in this pen at one time. The sows, being fed at the opposite side of the lot, are compelled to take exercise in going backwards and forwards for their food, and we find this has a very beneficial effect.

We find that very young pigs do not thrive when in the pen along with large pigs, particularly during cold weather when it is difficult to secure thorough ventilation. We have therefore repaired the old piggery and arranged it for a farrowing pen, in which the sows are brought from the outside lot previous to farrowing, and in which the young pigs can be kept until they are at least several months old. The large piggery is used for the boars and pigs that are large enough to be kept in a large pen with other pigs without injury. When the sows are kept in as cold quarters as we are keeping ours, they require rather more meal, but we find that it is money well expended. Our principal meal ration for sows consists of ground oats and bran, with sometimes middlings or shorts mixed with it. In addition to this, we feed a fairly liberal amount of either roots or the refuse from the College kitchen. The same meal ration is used at all times for our breeding sows, and we find that the mixture of oats and bran is about as satisfactory food as we can use when a sow is nursing her pigs.

We have never found anything more satisfactory than skim-milk and middlings for young pigs after they are weaned, though I believe a few oats mixed with this ration is rather an advantage. When skim-milk is not available, the middlings are better scalded, and allowed to steep for several hours before feeding. We have never been able, however, to secure as good results when skim milk was not available. As the pigs become older, we usually introduce a little ground barley into their ration, and the proportion of barley is usually increased until it is at least half of the total ration fed. All our hogs are fed either roots or kitchen refuse in addition to the meal ration, as we find a variety of food of this kind, especially the addition of a bulky food, is beneficial to the digestive organs.

During the summer, our sows are pastured in a small lot adjacent to the buildings, though we have found difficulty in securing crops that would give pasture early in the spring. This fall we have sown some hairy vetches in the hope that they may give spring pasture, though I fear they may be winter-killed, as they did not make a very strong growth during the fall. Rye might be used with fairly good advantage for this purpose. For later pasture, we use rape, which we sow as early as possible in the spring, and we usually sow a second patch of rape for later pasture. Our aim is to make the sows take as much outdoor exercise as possible. We have not succeeded particularly well, however, in pasturing very young pigs, though we usually aim to give them exercise in paddocks adjoining the buildings.

LIVE STOCK EXPERIMENTS.

We are still-continuing our work with long-keep and short-keep steers, and with different methods of feeding swine. A full account of this work will be found in the report of the Lecturer in Animal Husbandry, who has assisted me in carrying it out. I regret to say that, owing to the necessity of changing experimental feeders twice during the past winter, our results with steers are very unsatisfactory. We have now obtained the service of an efficient feeder, and in future we hope to get better results, provided we are fortunate enough to be able to retain his services. Owing to the unsatisfactory nature of our results with steers, we have decided not to publish them this year, but to hold them over for comparison with next year's results.

OUTSIDE WORK.

During the past year, we have as usual had many calls upon our department for assistance in different parts of the Province. I believe it is good policy to comply with these requests as far as possible, because it tends to keep us in touch with the requirements of the farmers throughout the country, and also brings farmers into sympathy with the work of the College.

I have the honor to be,

Your obedient servant,

G. E. DAY.

PART X.

THE LECTURER IN ANIMAL HUSBANDRY.

To the President of the Ontario Agricultural College:

SIR,—I beg herewith to submit a brief report of my third year's work as Lecturer in Animal Husbandry.

The scope of my work has been defined in previous reports and consists, primarily, in giving instructions to students in Animal Husbandry, and also in taking charge, under the supervision of the Professor of Animal Husbandry, of the experimental feeding work. During the past summer, in the absence of the Farm Superintendent, Prof. Day, my duties were somewhat increased by my attention to matters relating to the Farm Superintendence.

The instruction work in Animal Husbandry I have endeavored to make as practical as possible, in doing which I have presumed greatly upon the generosity of numerous farmers and stock breeders in Toronto, Brampton, Hamilton, Alma, Salem, and a large number within a convenient radius of Guelph, to whose places I have taken the students, in order to bring them in personal contact with our leading stockmen and farmers, and especially that they might learn the judging, feeding, and management of the various classes of stock by personal observation on the farms and in the stables of these men. To those farmers and stockmen, who have so willingly given their time and allowed the use of their stock, I here take the opportunity of expressing our heartiest appreciation for their liberality and readiness in helping on this very important work.

During the year I have attended and taken part in several institute meetings, and have acted as judge of various classes of live stock at Toronto and a large number of smaller exhibitions.

EXPERIMENTS WITH SWINE.

BLOOD MEAL AND TANKAGE AS COMPARED WITH SKIM-MILK FOR HOGS.

In last year's report, an account was given of a series of experiments conducted to determine the value of Blood Meal and Tankage as supplementary foods to an ordinary meal ration for hogs. These foods are by-products from the slaughter houses, but, as yet, are not manufactured by our Canadian firms in a sufficiently palatable form to be used as foods for animals. At present, blood-meal and tankage made in Canada are being sold to firms across the line to be used as fertilizers. The importance of retaining and feeding these by-products on our own farms, rather than allowing them to go out of our country, is apparent to any one who realizes the importance of maintaining and increasing the fertility of our Canadian farms.

The tankage and blood-meal used in this experiment were supplied by Swift & Co., of Chicago, and, although supplied free by that firm on account of being used for experimental purposes, would have cost us for blood meal \$55 per ton and for tankage \$33 per ton. No doubt Canadian firms could supply these foods at a cheaper rate, but the calculations in the table below are made upon a basis of the above prices.

In this experiment there were eight groups of pigs,—four in each group, averaging in weight from 21 to 40 pounds. All were fed the same meal ration, consisting, at first, of pure middlings, but with a gradually increasing amount of barley and some oats, until at the last the ration consisted of about

three parts barley, one part oats, and one part middlings. In addition, supplementary foods were added to nearly all the groups. The following table shows the ration for each group.

Group 1.	Blood Meal and Meal.	Proportion 1:9.
" 2.	" " " "	1:14.
" 3.	Tankage and Meal.	" 1:9.
" 4.	" " " "	" 1:15.
" 5.	Skim-milk and meal.	" 2:1.
" 6.	Meal alone.	"
" 7.	Blood Meal, milk and meal.	1:15:15
" 8.	Tankage " " "	1:15:13.

The experiment was commenced on June 27th, and completed on November 23rd. This was rather a longer feeding period than last year's due in part to the character of the pigs themselves, but also because they were not fed quite as heavily as those of the previous year. It is a significant fact that the slightly lighter feeding, although it did require a longer period, proved somewhat more economical of grain and other foods.

The blood meal or tankage or milk were mixed with the regular meal ration and moistened to a thick paste. The pigs were fed just about as much as they would eat up clean twice each day. Water *ad libitum* was supplied in the troughs afterwards. In addition, the pigs were fed at noon a very small armful per pen of grass or clover, or green oats or rape or soy beans and latterly roots, all of which were conveniently near the piggery. In the statement, made below, no account is taken of this but, at the same time, we have found that even a very little green food fed regularly, as above described, is a most beneficial food for pigs.

The table presented below gives the gains, the food consumed, and the cost of producing the gains. In estimating the latter, meal is valued at \$18 per ton, blood-meal at \$55 per ton, tankage at \$33 per ton, and skim-milk at 10 cents per hundred.

Group.	Gain.	Food consumed.	Food consumed for 100 lbs. gain.	Cost of 100 lbs. gain.
1. Blood Meal and Meal, heavy blood meal ration.	501 lbs.	Meal 1,757 lbs.; blood meal 194 lbs.	Meal 351 lbs.; blood meal 39 lbs.	\$4.23
2. Blood Meal and Meal, light blood meal ration.	461 lbs.	Meal 1,710 lbs.; blood meal 123 lbs.	Meal 371 lbs.; blood meal 27 lbs.	4.08
3. Tankage and Meal, heavy tankage ration.	501 lbs.	Meal 1,851 lbs.; tankage 199 lbs.	Meal 369 lbs.; tankage 40 lbs.	3.96
4. Tankage and Meal, light tankage ration.	498 lbs.	Meal 1,720 lbs.; tankage 144 lbs.	Meal 345 lbs.; tankage 23 lbs.	3.48
5. Skim-milk and meal.	568 lbs.	Meal 1,888 lbs.; milk 3,236 lbs.	Meal 332 lbs.; milk 639 lbs.	3.63
6. Meal alone.	481 lbs.	Meal 1,980 lbs.	Meal 412 lbs.	3.70
7. Blood Meal, Milk and Meal.	562 lbs.	Meal 1,862 lbs.; blood meal 120 lbs.; milk 1,871 lbs.	Meal 330 lbs.; blood meal 22 lbs.; skim-milk 333 lbs.	3.92
8. Tankage, Meal and Milk.	597 lbs.	Meal 1,744 lbs.; tankage 126 lbs.; skim-milk 1,942 lbs.	Meal 298 lbs.; Tankage 21 lbs.; skim-milk 325 lbs.	3.66

NOTES ON ABOVE TABLE.

1. In comparison with last year's experiment, the results are not so much in favor of blood-meal and tankage; but, summarizing all the conditions, we
7a A.C

consider the figures quoted in this table represent about rightly the comparative value of these supplemental foods.

2. The pigs fed on meal alone made very satisfactory but not as large gains as those in the other groups, and had they been finished to the same degree, for example, as groups 7 and 8, would have cost considerably higher than the figures stated here.

3. Allowing for rate as well as for cost of gain, the groups of pigs are rated as follows: Group 5 receiving skim-milk and meal, and group 8 receiving tankage, skim-milk and meal, best and about equal; next in order are group 7, group 4, group 6, group 3, group 2, group 1.

4. By reference to the table it will be seen that blood meal, mainly on account of its extra cost, proved the least satisfactory of these supplemental foods. Tankage proved much more satisfactory and, while not quite equal to skim-milk, yet, when fed in small quantities along with a small quantity of skim-milk, gave about the best results.

5. Judging from this, we would say that tankage would prove itself an excellent food to add to a ration for pigs when only a limited amount of skim-milk was available, which is often the case on the average farm.

6. In both cases where tankage and blood-meal were fed in different proportions, the smaller proportion proved more satisfactory. This is about what we would expect in considering the nature of the main meal ration, viz., middlings, barley, and oats. Had the ration consisted of a large amount of corn, it is very likely that the larger amount of these by-products would have proved more satisfactory.

7. Averaging up these results by comparing the gains and rate of gain made when meal alone was fed with those made when supplemental foods were fed, we may, roughly, indicate the figures a farmer could afford to pay for these foods, for the purpose of pig feeding: Skim-milk 15 cents per hundred; Blood-meal \$30 per ton, and tankage \$30 per ton.

PIGS ON PASTURE.

During the same period that the above pigs were fed inside, we fed pigs outside in order to compare the economy of pasture feeding with that of pen feeding. Those who have kept in touch with our former experiments in the pasture feeding of pigs, will remember that we have invariably reported this method to have cost us more than pen feeding. Hence, this year, we selected the 24 growthiest pigs of the lot to be turned out on pasture in order to see just how favorable results we could get.

The pigs were divided into two groups of 12 each. Lot one received as a meal ration just what they would eat up clean. Lot two received about two-thirds as much meal as lot one and, so, had to depend somewhat more on pasture for sustenance although, it must be added, that they did not seem to eat much more green feed than the heavy-feed lot.

The crops used for pasturing were, first, clover and, latterly, rape. In order to economize the pasture as much as possible, we hurdled off only a small part of a field at first, and gradually moved the hurdles back so that the pigs had fresh pasturage about every week. The pigs found shelter in movable houses.

The pigs were turned out on June 22nd, at which time they averaged in weight about 50 pounds. They ran for five weeks on clover and for other ten weeks, on rape. In all, the pigs used about an acre of pasturage. On October 7th they were brought inside and fed for seven weeks more, receiving during this period roots to take the place of the succulent pasture food. During the latter period, both groups received all the meal they would eat.

The following table shows the gains, and pounds of meal consumed up to the end of the time the pigs were on pasture, and the total gains and total meal consumed and the cost of this from beginning to end of experiment. In estimating this cost, meal is charged at \$18 per ton and no account is taken of the cost of pasturage; but this is discussed in Note 2 below.

Group.	Gain June 22— Oct. 7.	Meal consumed.	Meal for 100 lbs. gain.	Total gain June 22— Nov. 23.	Total Meal.	Meal for 100 lbs. gain.	Cost of Meal for 100 lbs. gain.
Heavy feed.	928 lbs.	3,907 lbs.	421 lbs.	1,334 lbs.	6,919 lbs.	517 lbs.	\$4.65
Light feed.	861 lbs.	3,041 lbs.	353 lbs.	1,339 lbs.	5,969 lbs.	445 lbs.	\$4.00

NOTES.

1. It cost more to finish these pigs than the ones in the former experiment.

2. The pasturage and roots allowed the whole 24 pigs was worth about \$20, and, if this were taken into consideration, the cost of 100 lbs. gain would have been increased about 60 cents in each case.

3. As compared with this, the green feed given to the pigs inside did not cost more than one-third as much, so that, had this item been taken into the calculation, the results would have been still more in favor of the inside pigs.

4. In former years, the results have been even more decidedly in favor of inside pigs, but, as stated above, we made every effort, this year, to give the outside lot the best chance, and feel sure that at least, so far as young pigs are concerned, feeding inside, under the conditions prevailing at Guelph, is more economical than feeding outside.

5. In looking over the table, the reader will notice the increased amount of grain required for 100 lbs. gain during the last stage as compared with the former stage. This is an illustration of a principle well known to feeders of all kinds of stock, viz., that the cost of gain increases with the age of the animal.

6. The importance of carefully husbanding the grain fed to pigs on pasture is strongly emphasized in this experiment. At the time the pigs went inside, the light feed ones were considerably thinner than the heavy ones, but they had developed just as big frames and went ahead more rapidly during the last stages of feeding, at which time they, too, were fed a full ration.

SOY BEANS *vs.* RAPE AS GREEN FEED FOR PIGS.

By way of variety in green feed, we grew a small plot of soy beans and, in order to determine their value, fed two groups of pigs of six each on the same meal and milk ration, but one lot Soy beans, and the other lot rape for green feed. The pigs averaged about 70 lbs. each at the beginning of the experiment August 18th, and were fed for 5 weeks, eating about four pounds each of Soy beans per day and about five and a half pounds each of rape per day. The following table shows the feed consumed and the gains made by each group:

Group.	Gain.	Feed consumed.
1. Fed Rape	145 lbs.	502 lbs. meal ; 1,004 lbs. milk ; 1,381 lbs. Rape.
2. Fed Soy Beans	159 lbs.	502 lbs. meal ; 1,004 lbs. milk ; 983 lbs. Soy Beans.

NOTES.

1. It is evident that the Soy beans are a richer food than rape, a lesser quantity producing a greater gain.

2. On the other hand, Rape is a heavier yielder per acre than Soy beans, the yields of fresh cut forage in this case being: Rape 22 tons per acre and Soy beans 15 tons per acre.

3. From this it is evident that, for purposes of feeding green forage to pigs in pens, a given amount of land might be equally profitably sown with either Soy beans or rape.

4. When, however, it is desired to pasture pigs on one or the other crop, rape will stand the tramping, etc., much better, and is the more profitable crop.

5. We commenced feeding the Soy beans when they were in blossom, and they kept wonderfully green for about 5 weeks after this.

6. For particulars with regard to Soy beans see report of the Experimentalist.

EXPERIMENTS IN STEER FEEDING.

During last winter we conducted experiments in feeding long-keep and short keep steers, and also conducted a test with steers fed loose as compared with those tied in stalls. Unfortunately, however, we were compelled to change feeders three times during the experiment, and, believing, that our results were prejudicially affected by this fact, we have decided not to publish them this year, but to hold them over for verification by future experiments.

Respectfully submitted,

M. CUMMING.

PART XI.

THE PROFESSOR OF HORTICULTURE.

To the President of the Ontario Agricultural College:

SIR,—I have the honor of presenting herewith my twentieth annual report on the work of the Horticultural Department. We have had a very busy year and are pleased to be able to report good progress. The work in this department is so varied that it is impracticable to treat of it in detail in a report of this kind. We will, therefore, merely mention some of the lines that have engaged our attention, and deal more fully with a few of those which may be of most interest to the public.

TEACHING.

At an educational institution of this kind, the instruction of students naturally must receive first consideration, and with this work we have been engaged most of the time for eight or nine months of the year. A full course of instruction in Horticulture, as outlined in the College Circular, has been given to the students of the first, second, and fourth years. The course embraces lectures, laboratory, and practical work in fruit growing, vegetable gardening, landscape gardening, and floriculture. We have been endeavoring year after year to make the course as thorough and practical as possible, and after fifteen years experience here, and from observations made at many of the leading Agricultural Colleges in the United States we feel confident that our students are getting as thorough and as practical a course in general horticulture as can be obtained anywhere on this continent. While this might seem like boasting, I do not take the credit to myself, for in class-room, greenhouse, lawn, garden, and orchard work I have had valuable assistance from others engaged in this department.

Our equipment in many respects is good, but we hope to make it still better. One important change made this year has been the building of a new and modern greenhouse on the site of the old conservatory. The display of plants and bloom in our conservatory has always been of great interest to thousands of our visitors, but has not been so valuable for the instruction of students as it might have been. The new building will be used primarily for the instruction of students during the winter months, and as far as practicable will be stocked with plants which will make an instructive display for the benefit of visitors in the summer.

The new house is 66 feet long by 26 feet wide and 18 feet high at the ridge, being three times as large as our old horticultural laboratory. It will afford excellent accommodation for our classes, and will permit of more demonstration work than was before possible. The old laboratory will be used as a plant house. The accompanying illustration is from a photograph taken last winter, when it was in use by about 100 of the students for practice in propagation and plant breeding.

CLASSES WITH MACDONALD INSTITUTE STUDENTS.

The Macdonald Institute, as a new department of the College, with its large classes of lady students and teachers in training for improvement of rural schools, in this and the Eastern Provinces, has brought us many new students interested in special lines of horticultural work.

These students require special classes and different courses of instruction from our regular full course students. Some of them are interested more particularly in school garden work and methods of practical instruction in agriculture and horticulture. Others are especially interested in floriculture and landscape gardening—the ornamental rather than the commercial branches of horticulture.

Some of the ladies took the regular long course in vegetable gardening with our Second Year students, and a special course in greenhouse work throughout the spring term.

To another class we gave a course of ten lectures with demonstrations and practical work, dealing especially with home floriculture and the small fruit and vegetable garden.

During the year we had two large classes of teachers in training, to whom was given a short course of lectures dealing with school garden work, and practical demonstrations in the laying out and planting of school gardens.

All of these are new courses instituted this year, and we expect to see them greatly improved and extended next year.

CORRESPONDENCE.

The number of questions sent in by correspondents all over the country is increasing year by year. Over a thousand letters have been received and answered during the year. To answer all of these carefully requires a great deal of time and often considerable research, but it is doubtful if more valuable assistance can be given in any other way. Many of these questions and answers which were of general interest to the public as well as to the questioner, have been published in the *Canadian Horticulturist* and the *Farmers' Advocate*. We are pleased at all times to render assistance of this kind and will be glad to do so in the future as time and space will permit.

MEETINGS ATTENDED.

During the year I attended and took part in the following public meetings:—

A series of orchard meetings near Ingersoll, and gave a talk on Cultivation and Cover Crops for the Orchard.

The Toronto Horticultural Society, and gave an address on Beautifying Home Grounds.

Five meetings of the Guelph Horticultural Society, and addresses on various Horticultural topics.

Commencement exercises in the Guelph Central school on the occasion of the awarding of prizes to the school children in an aster growing competition.

St. Joseph Island Farmers' Institute picnic at Richard's Landing and gave an address on the Work of the Algoma Fruit Experiment Station.

Canadian National Exhibition at Toronto, and gave an address on the care and Management of Orchards.

The Canadian Forestry Association, at Toronto, and gave an address on "Some Ontario Forest Problems."

Ontario Fruit Growers' Association meeting at Toronto, and gave an address on the Planting of Home and School Grounds, also a Report on New and Seeding Fruits of the year.

The Guelph Winter Dairy School, and gave a lecture on the Cultivation of Small Fruits in Connection with Dairying.

The Short Course in Stock and Grain Judging, and gave a lecture on Improving the Appearance of Rural Homes.

The Ontario Agricultural and Experimental Union meeting at Guelph, and gave report on the Co-operative Testing of Small Fruits.

The Norfolk Union Fair at Simcoe, and judged the display of fruits; and gave suggestions for improvement of horticultural exhibit.

The Central Exhibition at Guelph, and judged the display of fruits.

This department also made a large educational exhibit at the Provincial Fruit, Flower, and Honey Show of diseases and insects affecting fruits and garden crops, and gave directions for combatting the same; also exhibit of methods and tools for grafting, protecting trees from girdling, etc.

REPORTS AND ARTICLES PUBLISHED.

For the Fruit Experiment Station Report. A report on my annual inspection of the stations.

For the Ontario Fruit Growers' Report. A report on Some of the Promising New and Seedling Fruits of the Year, also an illustrated article on the Planting of Home and School Grounds.

For the Experimental Union Report. An account of our work in the Co-operative Testing of Small Fruits throughout the Province.

For the Report of the Canadian Forestry Association, an article on "Some Ontario Fruit Problems."

For the *Weekly Sun*, an article on "The Necessity for Adopting the Co-operative Plan of Packing and Handling Fruits."

For the local newspapers of the Province, a press bulletin "on The Growing of Rhubarb in the Cellar in Winter."

For the *Canadian Horticulturist* and *Farmers' Advocate*, numerous short articles on various subjects is answer to the questions of correspondents.

In conjunction with Prof. Reynolds, a bulletin now in press, dealing with the trial shipment of two cars of fruit from St. Catharines and Grimsby to Winnipeg.

INSPECTION OF FRUIT EXPERIMENT STATIONS.

At various times during the summer, as I could conveniently get away from the College I have visited each of the thirteen fruit experiment stations located in different parts of the Province. These stations are engaged in a work of inestimable value to the farmers and fruit growers of this country, and we would advise a careful perusal of the experiment station Report by all interested in fruit growing. A full account is given this year of the way in which the various classes of fruits stood the severity of last winter; and carefully revised lists are given of the varieties of fruits best suited for the different sections of the Province.

CO-OPERATIVE TESTING OF SMALL FRUITS.

Eleven years ago we began in a small way the co-operative testing of strawberries, raspberries, and currants. Sixty experimenters then took part in this work. Year by year the work has been extended; new classes of fruits have been added, and we are now testing in this way the leading varieties of all of the small fruits commonly cultivated in this country, and

have on our books the names of about 1,500 persons who have taken up this work.

The varieties selected for distribution are those which have been found by repeated tests here and also at our Fruit Experiment Stations to be among the best.

The following is the list of plants offered for testing last spring:—

- I. Strawberries: Clyde, Tennessee, Irene, and Van Deman—12 plants of each.
- II. Raspberries: Cuthbert, Golden Queen, Marlboro', and Columbian—6 plants of each.
- III. Black Raspberries: Gregg, Kansas, Palmer, and Older—6 plants of each.
- IV. Blackberries: Agawam, Gainor, Kittatinny, and Snyder—6 plants of each.
- V. Currants: Fay, Raby Castle, Victoria, and White Grape—2 plants of each.
- VI. Black Currants: Champion, Lees, Naples, and Black Victoria—2 plants of each.
- VII. Gooseberries: Downing Pearl, Red Jacket, and Whitesmith—2 plants of each.

Anyone wishing to join in the work next spring may do so by making application to the Horticultural Department, Ontario Agricultural College, Guelph, and a circular will be sent stating terms upon which the plants are sent out.

TRIAL SHIPMENT OF FRUIT TO WINNIPEG.

Last September a trial shipment was made to Winnipeg of two car loads of tender Ontario fruits from St. Catharines and Grimsby. This shipment was planned by Prof. Reynolds of the department of Physics, and carried out with assistance from me, primarily with the object of finding out how such fruits could be carried to the North-west in refrigerator cars. Incidentally a number of other matters in connection with the handling of fruit have been brought to notice which are quite as important to the fruit trade at present as the question of transportation. Among these are the degree of maturity at which the various fruits should be picked for distant shipment; the size and style of package best suited for the various classes of fruits; and, above all, the need of greater uniformity in grading, packing, and branding of fruit for market. Fuller particulars on these points are given in a bulletin now in press.

ORCHARD COVER CROPS.

For the past two years we have been conducting an experiment in our orchard with various kinds of cover crops. Both seasons have been moist and favorable for the growth of these late sown crops, and, on the whole, they have done remarkably well. Notes were taken late in the fall, both this year and last, on the growth and stand of each crop at the end of the season, and also last spring on the appearance of the previous season's crop

after passing the winter. We hope to continue this work until we have definite knowledge regarding the most satisfactory kinds of crops for this purpose, and next year we would like to have assistance from the Chemical Department in order to ascertain the effect of the various crops upon the chemical composition of the soil.

NOTES ON CONDITION OF 1903 CROPS IN SPRING OF 1904.

The following notes on these crops are given by H. S. Peart, B.S.A., Demonstrator in this Department, who carried out the details of the experiment:

On July 31st and August 1st, 1903, a number of cover crops were sown in the College orchard. The fall growth of these was reported on last year. The following notes taken on May 7th, 1904, will give some idea of the relative merits of the various crops and their powers of withstanding the winter and continuing growth in the spring:—

No. 1. *Red Clover*, sown at the rate of 15 pounds per acre, wintered very well and produced a mat about 3 inches thick to plow under in the spring.

No. 2. *Mammoth Clover*, sown at the same rate as red clover in No. 1, was practically equal to it this spring.

No. 3. *Crimson Clover*, sown at the rate of 20 pounds per acre, made a fair cover in the fall, but was nearly all dead in the spring.

No. 4. *Hairy Vetch*, sown at the rate of 40 pounds per acre made a dense mat in the autumn and in the spring was fresh and green with about 5 inches of growth on May 7th. An excellent cover, but the seeding was evidently heavier than necessary.

No. 5. *Alfalfa*, sown at the rate of 30 pounds per acre, came through the winter in first-class condition, standing about 6 inches high and very even.

No. 6. *Rye*, sown at the rate of 1½ bushels per acre, grew to a length of about 20 inches in the fall. It formed a good cover, but about twenty-five per cent. killed out during the winter, leaving the stand rather uneven.

No. 7. *Rape*, sown at the rate of 10 pounds per acre. Made a rank growth in the autumn, standing nearly two feet high on the ground, but was nearly all killed during the winter.

No. 8. *Hairy Vetch*, 40 pounds and *Rye* 30 pounds per acre. Both crops wintered well, the vetch being about 3 inches and the rye 8 inches high. These crops do better separately than when mixed, as the rye smothers to some extent the lower growing vetch.

No. 9. *Hairy Vetch*, 20 pounds and *Cow Horn Turnips* 12 ozs. per acre. The turnips were killed during the winter, and the vetch was too thin for a satisfactory cover.

No. 10. *Hairy Vetch*, 20 pounds, *Crimson Clover* 8 pounds, and *Cow Horn Turnips* 8½ ounces per acre. This mixture did not make a good cover in the fall, and in the spring both clover and turnips were dead, leaving the vetch too thin.

No. 11. *Hairy Vetch* 20 pounds and *Crimson Clover* 8 pounds per acre. The clover killed out; the vetch formed only about two-thirds enough top for a good cover.

No. 12. *Hairy Vetch* 20 pounds and *Red Clover* 8 pounds per acre. Both crops wintered well, but the cover was very much too thin.

No. 13. *Hairy Vetch* 20 pounds and *Mammoth Clover* 8 pounds per acre. Very similar to No. 12.

No. 14. *Rye* 1 bushel and *Rape* 4 pounds per acre. The rape nearly all killed out and the rye, owing to having been smothered by the rape in the fall, was very poor. Practically no winter cover.

No. 15. *Alfalfa* 15 pounds and *Red Clover* 8 pounds per acre. A good cover, the alfalfa being 6 inches and the clover 3 inches high and quite thick in the spring.

No. 16. *Alfalfa* 15 pounds and *Mammoth Clover* 8 pounds per acre. A good cover, similar to No. 15. About the centre of this plot was a patch of chickweed which killed out all the other plants but formed a very heavy and desirable cover in itself.

No. 17. *Alfalfa* 15 pounds and *Crimson Clover* 8 pounds per acre. The *Crimson* clover all died in the winter and left the alfalfa too thin for a good cover.

From the above notes it will be seen that *Hairy Vetch*, *Red* and *Mammoth Clover*, and *Alfalfa* all made good leguminous covers and that *Crimson Clover* did not stand over winter. Among the non-leguminous crops *rye* was superior to either *rape* or *turnips*.

NOTES ON COVER CROPS IN THE AUTUMN OF 1904.

During the past summer a number of the most desirable cover crops, tried last year along with a few new ones, were sown on July 20th and 21st. The ground was in fine condition, having been cultivated regularly during the early summer. A brief account of their relative growth as recorded on October 6th and again on October 26th is here given:—

No. 1. *Red Clover*, sown at the rate of 20 pounds per acre, made an even thick stand about 4 inches high.

No. 2. *Mammoth Clover*, sown at the rate of 20 pounds per acre, made growth very similar to No. 1. There is apparently little difference between the common and mammoth clovers at the end of three months' growth.

No. 3. *Crimson Clover*, sown at the rate of one-half bushel per acre. Made a rather uneven stand about 3 inches high, not as thick as No. 1 or No. 2.

No. 4. *Hairy Vetch*, sown at the rate of 35 pounds per acre. This made a fairly good cover lying very close to the ground, being only two inches high. It was somewhat uneven.

No. 5. *Alfalfa*, sown at the rate of 30 pounds per acre, made a good even cover about 10 inches high.

No. 6. *Rye*, sown at the rate of 1½ bushels per acre, made only a fair mat about 3 inches thick. The outer leaves were badly rusted, hence the growth was not so vigorous as it might otherwise have been.

No. 7. *Rape*, sown at the rate of 8 pounds per acre, made a very vigorous growth about 2 feet high.

No. 8. *Hairy Vetch*, 20 pounds and *Red Clover* 10 pounds per acre, made a rather uneven covering, averaging about 3 inches high.

No. 9. *Hairy Vetch*; 20 pounds and *Mammoth Clover* 10 pounds per acre, made slightly better growth than No. 8.

No. 10. *Hairy Vetch*, 20 pounds and *Crimson Clover* 12 pounds per acre, made a growth very similar to No. 8.

No. 11. *Alfalfa*, 15 pounds and *Red Clover* 8 pounds per acre. This mixture did not do nearly so well as last year, the clover being almost completely smothered by the alfalfa, which made about 10 inches of growth.

No. 12. *Grass Peas*, sown at the rate of 2 bushels per acre, made a rank cover about 9 inches thick, but were killed by frost by October 25th.

No. 13. *Alfalfa*, 15 pounds and *Crimson Clover* 10 pounds per acre, made a growth very similar to No. 11.

No. 14. *Medium Green Soy Beans*, 50 pounds and *Early Yellow Soy Beans* 100 pounds per acre. The seed of the *Early Yellow* beans was very low in vitality and made a poor stand. This crop made a very poor cover, and was frozen by the first frost.

No. 15. *Crimson Clover*, 10 pounds, *Horse Beans* 25 pounds, and *Prussian Blue Peas* 25 pounds per acre. The peas grew rather strong, making about 15 inches of growth. The clover was small and weak. The beans germinated very poorly and produced but few plants. The crop did not make a very satisfactory cover this year.

The comparative value of these crops will be noted again in the spring of 1906 and reported on later.

So far as this experiment has gone, the most satisfactory cover crops have been *Hairy Vetch* at the rate of 35 pounds per acre; common red or mammoth clover at the rate of 15 pounds per acre; alfalfa at the rate of 30 pounds per acre; rye at the rate of 1½ bushels per acre; and rape at the rate of 8 pounds per acre.

ORCHARD FRUITS.

Last winter was one of the severest on fruit trees that have been experienced in this Province for many years. Peaches, pears, plums, and cherries, have suffered the most, and in some sections of the Province the greater number of these trees have been killed out. Even old established apple trees which have been bearing for years suffered severely. As a rule the trees most injured were those which bore heavily the summer before, their vitality no doubt being lowered by excessive fruit bearing.

Our orchards at the College are far from being typical of the best orchards in the country in proximity to the great lakes, yet they represent what may be found in many of the northern and inland sections. At pruning time last spring it appeared doubtful if many of the trees would recover from their winter injuries. The wood was black and the sap soured. The records taken later on showed the real extent of the injury, and it is quite likely that many of those that lived through the summer will not survive another winter.

APPLES. In our young apple orchard where the trees are only eight years planted, there was only 10 per cent. of the trees winter killed. The *Baldwins* were all killed. We had twenty dwarf apple trees on *Paradise* stock, ten varieties, two trees of each, one-half of which were winter killed, the loss evidently being due to the stock upon which they were worked, rather than to the variety.

Notwithstanding the severe winter there were fifty-two varieties, or nearly half of those in the orchard, which bore fruit this year. These are classified below according as they bore a heavy, medium, or light crop:—

Those which bore heavily were:—*Ben Davis*, *Copper's Market*, *Gideon*, *Grime's Golden*, *Longfield*, *Wealthy*, *Wellington*.

And the following crab apples:—*General Grant*, *Hyslop*, *Martha*, *Montreal Beauty*, *Transcendant*, and *Whitney*.

Those which bore a medium crop were:—*Alexander*, *Babbitt*, *Blenheim*, *Gann*, *Haas*, *Hare Pipka*, *Magog-Red-Streak*, *North-west Greening*, *Ontario*, *Shank-Mord*, *Tolman*, *Transparent*, *Trenton*, and *Wallbridge*.

Those which bore a light crop were:—*Astrachan*, *Beitigheimer*, *Canada*, *Heart*, *Fameuse*, *Fallawater*, *Golden Russet*, *Hubbardston*, *Maiden's Blush*, *McMahon*, *McIntosh*, *Pewaukee*, *Peter*,

Ribston, Rome Beauty, Salome, Scott's Winter, Seek-no-further, St. Lawrence, Tetofsky, Utter, Wagener, and Wolf River.

PLUMS. Nearly 20 per cent. of our plum trees were winter killed, and many of those that survived are severely injured. The Japan varieties came through quite as well as the European kinds, but there was no fruit on any of the varieties in 1904.

PEARS. Over 35 per cent. of the standard pear trees were killed, and probably not half of those left will ever fully recover from the injury sustained. None of the survivors bore this year. Twenty dwarf trees on quince roots were all killed.

CHERRIES. About 44 per cent. of the cherries were killed, and nearly all of the sweet varieties were cleared out. The fruit buds on those left, even of the sour varieties, were destroyed.

PEACHES AND QUINCES. Twenty peach and twenty quince trees which had survived several winters were all killed out last winter.

Our experimental orchard, with the exception of the apple trees, was rather a discouraging sight this year, but we hope to profit by the experience gained and will replant with the more hardy kinds, and trust we may not in a long time have another such winter as the last.

THE BUSH FRUITS.

RASPBERRIES. Sixty varieties of raspberries have been under trial here for several years and careful records have been kept of their relative productiveness. Last year we observed that the plants in our whole plantation appeared to be losing vigor, so we decided to propagate new plants as quickly as possible and set out a new plantation. On taking up the plants last spring, we discovered the cause of the trouble in the form of large knotty swellings. These were identified by our College Biologist as raspberry root galls, caused by a slimy fungus known as *Dendrophagus globosus*. As this disease spreads rapidly and is without remedy, we were obliged to discard our own grown plants and dig and burn everything in the plantation. We have thus lost a collection of varieties that will take us some time to renew, but we succeeded in getting good plants from outside sources of a few of the old standard varieties, and the plants in the new plantation made good growth this year.

The varieties which have in the past given the best results are:—*Red*: Cuthbert, Marlboro', and Loudon.

Purple: Columbian.

Black: Older, Eureka, and Smith's Giant.

White: Golden Queen.

CURRENTS. We have now an excellent experimental plantation of currants in which are forty-six varieties—twenty-one red, twenty-two black, and three white.

Among twenty red varieties which fruited this year, the four at the head of the list for a total yield are Red Cross, Red Crape, Fay, and Victoria. The Red Cross also headed the list last year. It is an excellent variety. The fruit is almost as large as that of Fay, and the bush is of a much better habit, being upright and vigorous.

The White Grape still holds the record for being not only the best white currant, but the heaviest yielding variety in our whole collection.

Among the twenty black currants which fruited this year, the four at the head of the list for weight of crop are: Naples, Saunders, Prince of Wales, and Champion. These are all good varieties, but for large fine fruit

we prefer Black Victoria, which stands eighth on the list this year, although it was first last year.

GOOSEBERRIES. Forty-five varieties of gooseberries are under test in our gooseberry plantation, twenty-eight of which fruited this year. The crop, however, was a poor one, and a report of the comparative yields this year would be misleading. The varieties which have for an average of the past eight years been the most satisfactory are: Pearl, Downing, Red Jacket, and Whitesmith. The last mentioned mildews some seasons, but has proved to be one of the most reliable English sorts.

STRAWBERRIES. For nine years past we have been conducting an extensive variety test with strawberries. During this time about 350 varieties have been grown in our trial plots, and every new variety of promise has been given a trial as soon as plants could be obtained. A number of the best varieties have been retained from the beginning which form a good standard for comparison of the new ones, while the poorer ones have been discarded after they have been given at least five years' trial.

The relative standing of the old varieties varies from year to year, depending upon the season and ability of the variety to adapt itself to the varying seasons. Taking the average of one season with another, the following have been found to be a few of the most desirable kinds to cover the season from early to late:

Early: Splendid, Wesley, and Van Deman.

Midseason: Warfield, Clyde, Haverland, Williams, Tennessee, and Ruby.

Late: Irene, Buster, and Saunders.

From the above we would select Splendid, Clyde, Warfield, and Irene as four of the best for a home or market collection. The first two are perfect flowering varieties, and the last two are imperfect. Clyde is large, only moderately firm, and rather light in color. The other three are medium size, firm, and good dark color, which makes them particularly desirable for canning.

TOMATOES.

For seven years we have been trying to carry on a variety test with tomatoes, and have had in our trial plots fifty varieties. The past three seasons, however, have been so cool and moist that the crop has not ripened satisfactorily. Last summer was one of the coolest on record for many years, and on our heavy cold soil even the earliest varieties, which usually give a good crop, failed to ripen more than a few fruits. We cannot do better, therefore, than mention those varieties which have given the best results in our previous tests. These are: Earliana, Mayflower, Dominion Day, Atlantic Prize, and Earliest of All.

THE VEGETABLE GARDEN.

To supply the needs of the College dining hall we have had six acres devoted to vegetable garden, and will now have to double that area to meet the additional requirements of the Macdonald Hall.

To meet such a demand for supplies summer and winter has required a good deal of planning and careful management, but it has made it impossible for us to conduct extensive variety tests of vegetables, as we would have liked. It has necessitated our growing on a large scale those varieties most likely to supply the demand made upon us. We are therefore as yet largely in the position of market gardeners, rather than as an experiment station, in regard to the growing and testing of vegetables. However, as we have

had many requests for information along this line, we have prepared the following list of what we consider the leading varieties of the various crops usually grown in a vegetable garden. To this is added brief cultural directions for each crop.

LEADING VARIETIES OF VEGETABLES FOR A HOME GARDEN, WITH NOTES ON CULTIVATION.

ASPARAGUS. Conover's Colossal and Palmetto. Plant in rows 4 feet apart and 2 feet apart in the rows; apply manure liberally and cultivate thoroughly.

BEANS. *Summer*—Golden Wax. *Autumn*—Burpee's Bush Lima. *Winter*—Navy. Sow when danger of spring frost is passed.

BEETS. *Globe*—Egyptian Turnip. *Long*—Long Smooth Blood. Sow as soon as ground is fit to work. Thin when small to three inches apart and take out every other one as soon as they are large enough to use.

CARROTS. Chantenay and Scarlet Nantes. Sow early and thin the same as beets.

CABBAGE. *Early*—Winningstadt. *Late*—Flat Dutch and Savoy. *Red*—Mammoth Rock. Sow seed of early variety in hot bed about middle of March, and transplant to open ground about end of April. Sow seed of late varieties in the open ground about end of May, and transplant about first of July.

CAULIFLOWER. Extra Early Erfurt and Early Snowball. Treat the same as cabbage.

CELERY. *Early*—White Plume. *Medium*—Paris Golden Yellow. *Late*—Giant Pascal. Sow seed in seed box or hot bed about first of May. Prick out into flats or cold frame, when about an inch high, and transplant into trenches 4 or 5 feet apart about first of July.

CORN. *Early*—Golden Bantam and White Cory. *Medium*—Metropolitan. *Late*—Country Gentleman, and Stowell's Evergreen. Sow about first of May and if plants are injured by cold or frost sow again about 24th of May.

CITRON. Colorado Preserving. Sow in hills about 8 feet apart when danger of frost is over.

CUCUMBER. White Spine, for slicing. Cool and Crisp for pickling and slicing. Sow in hills about 4 feet apart when danger of frost is over.

EGG PLANT. New York Improved. Sow seed in seed box or hot bed about middle of April, and transplant in the open when danger of frost is past.

KOHL RABI. Early Purple Vienna. Sow seed early for summer use and again about middle of June for winter use.

LETTUCE. Hanson and California Cream Butter. Sow seed as early as possible, and at intervals of a month for succession. Thin plants to 6 or 8 inches apart for good heads.

MUSKMELLON. Rocky Ford or Emerald Gem and Montreal Market. Sow seed in well prepared hills when danger of frost is past.

ONIONS. Yellow Danvers, Prizetaker, and Red Wethersfield. Sow seed as early as possible. The thinnings may be used as green onions.

PARSNIPS. Hollow Crown. Sow as early as possible and thin to six inches apart in row. Leave part of the crop in the ground over winter for spring use.

PEAS. *Early*—Steele, Brigg's Extra Early. *Medium*—Gradus. *Late*—Champion of England. Sow early kinds as early as possible and others a couple of weeks later.

POTATOES. *Early*—Early Ohio. *Late*—Empire State. Keep potatoes for early planting in a warm room in the light for three weeks before planting. Plant a few for early use as soon as ground is fit to work, and follow with others when danger of frost is past. Plant late varieties about 24th of May.

PUMPKIN. Sugar. Plant when danger of frost is past.

RADISHES. *Early*—Rosy Gem and French Breakfast. *Winter*—Scarlet China. Sow early varieties as early as possible, and at intervals of two weeks for succession. Sow winter varieties in summer after crop of early peas.

RHUBARB. Victoria, or any other carefully selected seedling variety. Plant 4 feet apart. Manure liberally, cultivate thoroughly, and break out seed stalks as they appear.

SALSIFY. Long White. Sow as early as possible, and thin to four inches apart in the row. Part of the crop may be left in the ground over winter for spring use.

SPINACH. Victoria. Sow as early as possible, and at intervals of a month if succession is desired.

SQUASH. *Summer*—Crookneck and White bush scallop. *Winter*—Hubbard. Do not plant until danger of spring frost is over. Bush varieties require about 4 feet of space between hills. Hubbard should have at least 8 feet.

TOMATOES. Earliana, Dominion Day, and Mayflower. Sow seed in seed box or hot bed about the middle of April. Transplant in the open when danger of frost is past.

TURNIPS. Golden Ball and Hartley's Bronze Top. Sow early for summer use and about June 20th for winter use.

VEGETABLE MARROW. Long White Bush. Plant when danger of frost is past.

WATERMELON. Hungarian Honey and Cole's Early. Plant when danger of frost is past in well prepared hills 8 feet apart.

ORNAMENTAL SHRUBS.

Of late years there has been considerable inquiry from both town and country regarding the most desirable kinds of shrubs for lawn planting. The answer to such a question of course depends to some extent upon the locality for which the shrubs are desired, as there are a number of very desirable kinds which can be grown in the southern sections of the Province, but which would not do at all for the north or east.

We have had an excellent opportunity here on the College grounds for studying a large number of the more hardy kinds, and we are pretty safe in saying that what will do well here will do well over the greater part of the Province.

From careful observations made during the past ten years, we would select the following as thirteen of the best hardy ornamental shrubs, from among about 200 species and varieties which have been planted here at various times. The list is given in the order of their season of bloom and covers the season fairly well from the earliest bloom in the spring till frost destroys the last in the autumn:

1. *Forsythia suspensa*. Golden Bell. An open, spreading bush about six feet in diameter. Flowers large golden bells, an inch or more across, appear before the leaves, about the end of April, and last about three weeks; very showy.

2. *Ribes aureum*. Golden Currant. A very hardy vigorous growing bush about six or eight feet in diameter. Flowers golden yellow, very abundant, and having a delightful spicy fragrance. In bloom May 9th and lasts two weeks.

3. *Pyrus japonica*. Japan Quince. A showy bush six or eight feet in height, with glossy green foliage. Half hardy when young, but after a time becomes acclimatized and quite hardy. Flowers large and brilliant scarlet, some varieties pink and white. In bloom about May 15th and lasts nearly three weeks.

4. *Caragana frutescens*. Siberian Pea Tree. A very hardy showy little bush about five or six feet in diameter. Has a luxuriance of fine green foliage, which appears early and is followed about May 24th with an abundance of clusters of pea-shaped yellow flowers. Bloom lasts a little over a week.



Fig. 1. Horticultural Laboratory. Students at work in plant propagation.

5. *Syringa vulgaris*. Lilacs in variety. The common lilac is so well-known as not to need description and is appreciated by all who grow it. There are now a great many improved varieties, with single and double flowers, varying in color from white and pink to dark purple. In bloom about May 24th and lasts for two weeks or more. Some of the Chinese and Japanese species are very desirable and extend the season of bloom to July 1st.

6. *Pyrus angustifolia*. Bechtel's Double-flowered American Crab. This is a crab apple tree of medium size, and very hardy. Four years after planting it began to bloom and bears large, double pink flowers, an inch and a half in diameter. At a distance they look like small roses and are very fragrant. In bloom about June 1st and lasts about two weeks. These handsome flowers make such dainty buttonhole bouquets that on public grounds, such as ours, the tree becomes the prey of vandal bouquet lovers.

7. *Spiraea Van Houttei*, Van Houtte's Spiraea. This is one of the best of the spiraeas. It makes a graceful, symmetrical little bush, about five feet in diameter, with slender drooping twigs. The bloom is pure white, very profuse, appears the first week in June and lasts about two weeks.



Fig. 2. Hairy Vetch grown for a cover crop; a low, dense cover, excellent for an apple orchard.



Fig. 3. Rape as a cover crop. Two feet of growth in two months. Holds snow well.

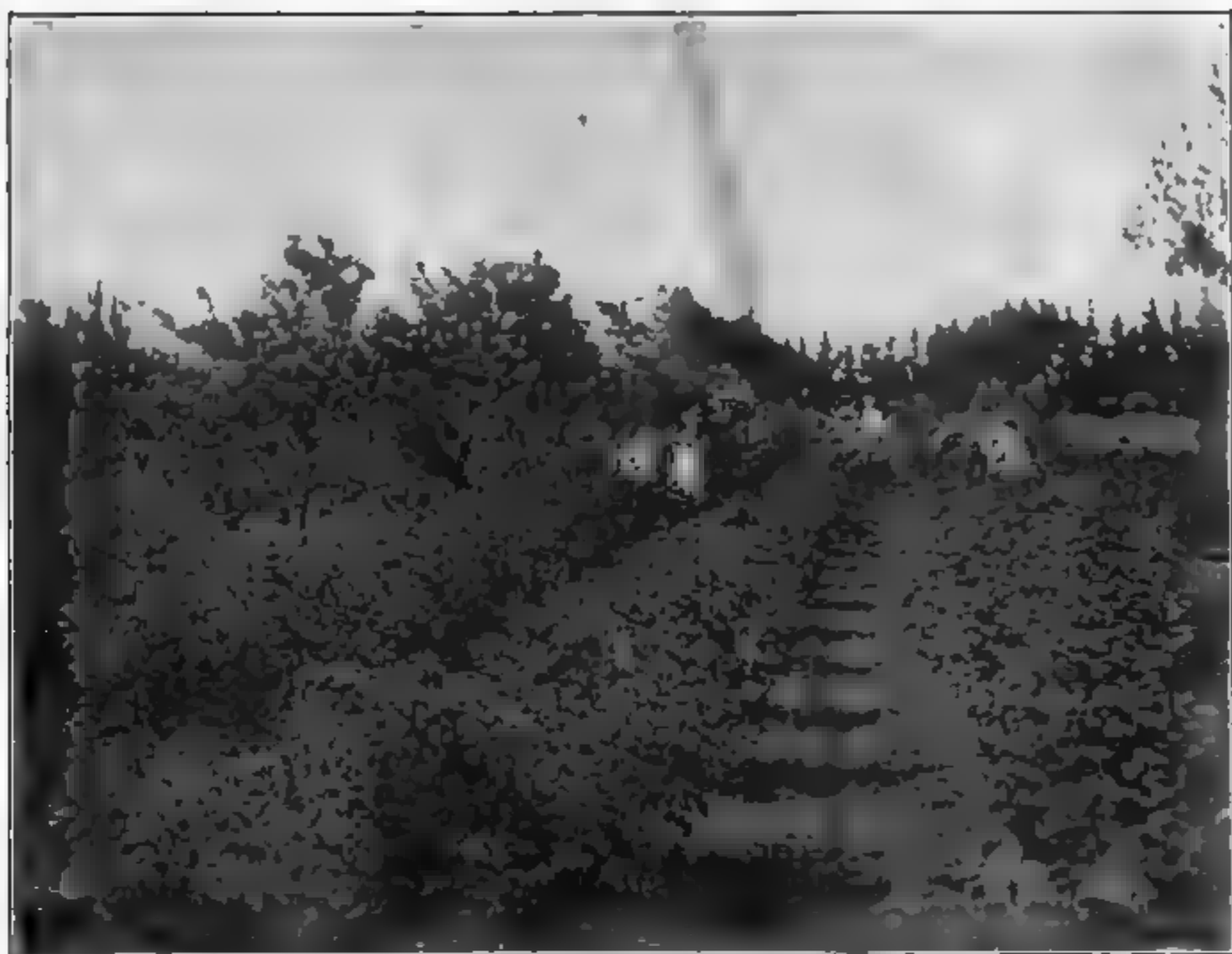


Fig. 4. Experimental Currant plantation. Forty-six varieties under test.



Fig. 5. Hardy perennial border—a very desirable feature on public or private grounds.

8. *Viburnum Opulus sterile*. Snow-ball. This a hardy free growing shrub about 10 feet high, which bears large round clusters of pure white flowers, which look like snow balls. In bloom about June 4th, and lasts over two weeks.

9. *Lonicera Tartarica*. Bush Honeysuckle. A very hardy symmetrical bush ten feet or more in diameter. Has an abundance of bloom every year, which appears the first week of June and lasts about a week. The bloom is followed by showy red or orange fruits, which make the bush attractive long after the bloom is gone. There are red, pink, and white varieties, all of which are worthy of a place on the lawn. Good varieties may easily be grown from the seed.

10. *Diervilla rosea*. Rose-colored Weigela. This is a handsome bush which is only half-hardy here when young, but becomes hardier with age. It makes a bush five or six feet in diameter. The flowers are large and bell-shaped, appearing among the foliage the first week in June and lasting nearly three weeks.

11. *Philadelphus coronarius*. Garland Syringe. A hardy, vigorous bush about ten feet in height, bears large white fragrant flowers like orange blossoms. In bloom about June 15th and lasts over two weeks.

12. *Rhus Cotinus*. Purple Fringe or Smoke tree. A hardy thrifty shrub which grows ten or twelve feet high and makes a shapely bush. About the middle of July it comes in bloom, and from then on till autumn, is covered with curious fringe or plume-like flowers which are very showy.

13. *Hydrangea paniculata grandiflora*. A somewhat straggling growing shrub, which may become six or eight feet high, but is better of being pruned back severely every spring, in the same way as roses. Bears large panicles of white flowers. In bloom about the middle of August and lasts three or four weeks.

WAX MODELS.

I am pleased to state that we have been able to retain the services of Mrs. Stanley Potter, our fruit model artist, and that she has made good progress during the year in adding to our collection of fruit and vegetable models. This collection is of great value to our students, and has been studied with interest by thousands of visitors. The varieties of the different kinds of fruits represented have now been classified and labelled so as to make the display as instructive as possible to visitors from all parts of the Province.

ACKNOWLEDGMENTS.

In conclusion, I wish to gratefully acknowledge the faithful and efficient services of those who have labored with me to make the work of this department a credit to the College. Mr. H. S. Peart, Demonstrator, has proved himself an able and willing assistant both in the class room and out of it. Mr. William Hunt, florist, has shown great skill and judgment in the management of the greenhouses, and has also rendered valuable assistance as an instructor. Mr. William Squirrell, who, for thirty years has had charge of the garden and grounds, has established for himself a reputation of which any gardener might well be proud.

I wish also, Mr. President, to take this opportunity of congratulating you upon your appointment as President of this Institution, and to thank you in closing this, my first report to you, for the kindness and courtesy you have extended to me as one of your staff.

Respectfully submitted,

H. L. HUTT.

PART XII.

THE PROFESSOR OF BACTERIOLOGY.

To the President of the Ontario Agricultural College :

SIR,—I have the honor to submit to you my report on this year's work in the Bacteriological Department.

LECTURES.

The following courses of lectures to students were given during the year :

1. A course of 30 lectures on Bacteriology and its relation to Agriculture and Dairying for second year students.
2. An advanced course of lectures on the relation of Bacteriology to Agriculture and the infective diseases of animals for fourth-year students.
3. A special course of lectures on the bacterial diseases of plants and the bacterial decomposition of fruits, vegetables, and other plant substances for fourth-year specialists in Biology and Horticulture. (See Fig. 1 and 2.)



FIG. 1. Horticultural specialists studying bacterial diseases of plants, 1904.

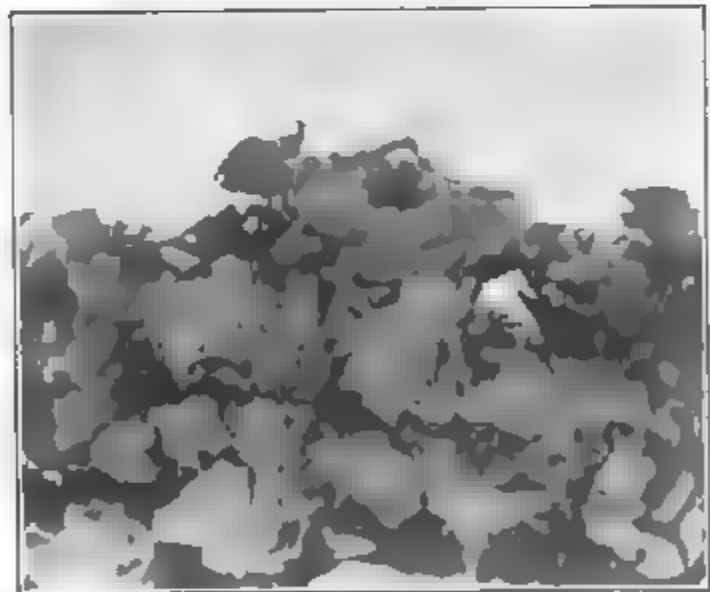


FIG. 2. Plants of Hubbard Squash showing natural infection with *Bacillus tracheiphilus*. Note the drooped appearance of the leaves. Photo taken on Sept. 14th., 1904.

4. An extensive course of lectures on Dairy Bacteriology to the fourth-year specialists in dairying.
5. Twelve lectures to the special short-course dairy students.
6. Short course of lectures to the students of the special Creamery Course, and also a few lectures to the Dairy Instructors who have control of the inspection of creameries and cheese factories during the summer under the supervision of the Superintendent of Farmers' Institutes. Four lectures for milk dealers and producers.
7. Twelve lectures to the Domestic Science students from the Macdonald Institute.
8. Four lectures, with demonstrations, to the students in the short course on Poultry Raising.

LABORATORY WORK.

At present, our accommodation does not permit us to give laboratory work to the second-year students or to the fourth-year specialists in Agriculture. These classes, however, should have laboratory work in order to supplement their lectures, and in this particular the teaching of the subject of Bacteriology is behind that of other departments. As soon as sufficient accommodation is provided, laboratory work will be started with these classes. At present the following classes take laboratory work: The Horticulture and Biology specialists, the fourth-year specialists in dairying, the dairy instructors, special creamery course students, milk dealers and producers, the special dairy class, and Domestic Science students. The special dairy class received twelve half-days' laboratory instruction, and, as the class was rather large, the work had to be repeated two or three times in order to give all members of the class the same instruction. I have already pointed out the great waste of time that this procedure involves. Special laboratory work has been given to those fourth-year students who have taken their thesis work in my department. One of the specialists in dairying spent two months during the summer at work on his thesis in this laboratory.

MEETINGS ATTENDED.

During the year I attended a number of conventions, and delivered addresses before several meetings and associations as follows:

1. The Dairymen's Association of Western Ontario. Address: "The Abnormal Flavors of Gathered Cream and Butter."

2. The Women's Institute of W. Middlesex. Address: "Bacteriology in its Relation to Domestic Science."

3. Canadian Association of Master Bakers. Address: "The Results of the Bacteriological Examination of 35 Samples of Canadian Flours."

4. The Ontario Bee-Keeper's Association. Address: "The Diseases of Bee Larvæ."

5. Buttermakers' Meeting of the Dairymen's Association of Western Ontario. Address: "Results of the Examination of a Number of Samples of Gathered Cream."

6. Short-Course Students in Stock Judging. Address: "Disinfection and Disinfectants."

7. The Ontario Library Association.

Papers were also sent to the Laboratory Section of the American Public Health Association and to the meeting of the Society of American Bacteriologists.

PUBLICATIONS.

During the year the Ontario Department of Agriculture has issued the following bulletins: Bulletin 136, "Some Bacterial Diseases of Plants Prevalent in Ontario," by F. C. Harrison and B. Barlow. Bulletin 137, "A Bacterial Disease of Cauliflower and Allied Plants," F. C. Harrison. The latter bulletin was also published in the II Abteilung of the Centralblatt für Bakteriologie. Besides these publications, a number of less important articles and notes were contributed to various Canadian agricultural periodicals.

ROUTINE LABORATORY WORK AND ANALYSES.

During the year we have manufactured and sent out 105 doses of tuberculin, and 112 pure cultures, or starters, for cheese and buttermakers. We

have also made bacteriological analyses and diagnoses of the following substances and have reported the results to those sending in the material:

Diseased hens	22	Off-flavored starters	2
" chicks.....	2	Viscid sugar-beet juice.....	1
" ducks.....	2	Bronchial exudate.....	1
" turkeys.....	2	Discolored bread.....	1
" organs, pus, tumors, etc	10	Foul brood.....	1
Anthrax	3	Water	12
Suspected diphtheria	5	Butter, rancid, oily, fishy, etc	15
Milk, off-flavored or suspected of causing disease.....	9	Spilled canned goods	19
Off-flavored cheese.....	3		
Cream	6		
Off-flavored curd.....	2		124

In connection with this work, I might call your attention to the large number of samples of spoiled canned goods that we have received, as indicating the interest of some Canadian canners in the problems which they have to solve and which have, in most cases, a bacteriological solution.

ASSISTANCE.

Mr. B. Barlow, Demonstrator in this Department, has rendered very efficient service during the year. His time has been largely occupied in preparing material for the various laboratory classes and in research work, particularly on the nitrogen-fixing bacteria of legumes and the bacterial diseases of plants.



FIG. 3. Leaves of Mammoth White Hubbard Squash. Natural infection with *B. tracheiphilus*. The leaf on the left shows the more advanced stage of the disease. Photographed 15th Sept. 1904.



FIG. 4. Portion of a cucumber vine showing natural infection with *B. tracheiphilus*. Note the wilted appearance of the leaves. Photographed 15th Sept. 1904.

RESEARCH WORK.

Several lines of investigational work have been conducted during the year. Bulletins 136 and 137 contain the results of a part of this work, but we have on hand a considerable amount of unpublished data which is, as yet, incomplete. At present we are working upon a rot of the potato, which has been very destructive during the past season, and upon perfecting the details with regard to the preparation of the various cultures necessary for inoculating the different species of legumes with nitrogen-fixing bacteria. We hope to be ready to send out cultures of these bacteria to all Ontario farmers who apply

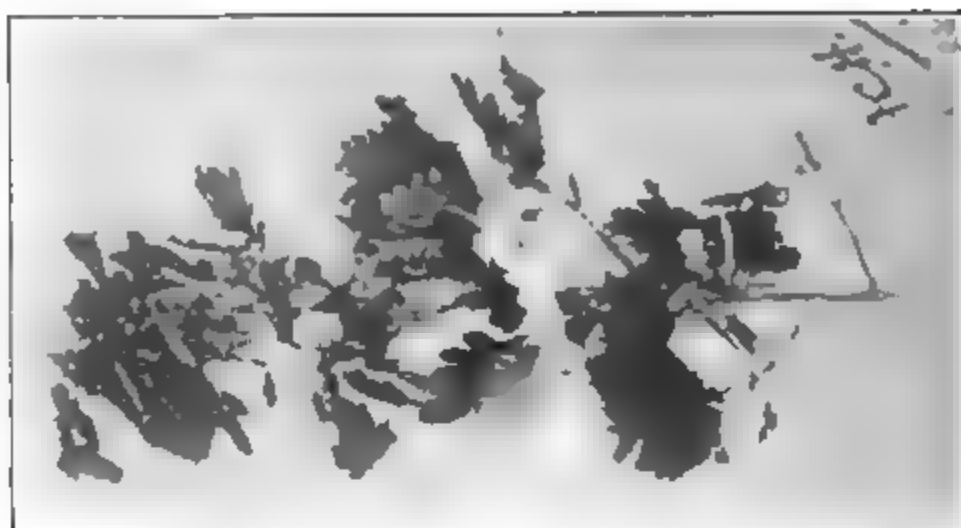
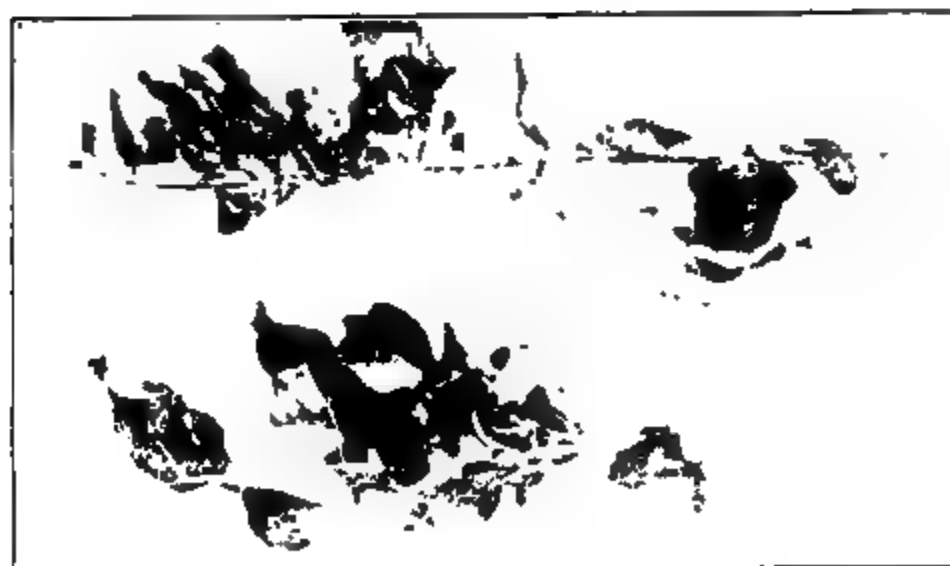


FIG. 6. A branch of Mountain Ash (*Pyrus acutipolia lactescens*), showing natural infection with Fire Blight organism.



FIG. 5. Fire or Twig Blight of the apple, showing natural infection through the twigs and blossoms, with the organism (*Bacterium amylovorum*) which causes this disease.



for them before the spring seeding. The results of the researches of the United States Department of Agriculture on the effect of these cultures upon legumes, and the publication of an article in the October Number of the Century Magazine, have resulted in calling attention to this important subject.

We intend to supply cultures for the following legumes: Red Clover, White Clover, Pea, Vetch, Soy Bean, Field Bean, and Alfalfa or Lucerne.

During the past season some bacterial diseases of plants were very common in this neighborhood, and we have made some progress in experimental work with these affections. In order to permit horticulturists and others to recognize and identify these diseases, Mr. B. Barlow, Demonstrator in Bacteriology, has prepared the following notes giving some of the symptoms of these diseases, and the results of a few experiments.

CUCUMBER WILT. (Caused by *Bacillus tracheiphilus*). A bacterial disease of the cucumber and of plants related to it has been prevalent during the past season in the gardens of the Horticultural Department and in the neighborhood. It has injured and killed vines of the cucumber, squash, and pumpkin.

The germ causing this disease, *Bacillus tracheiphilus*, has been known and studied for some years. The disease may be recognized by the sudden wilting of the leaves when the weather is not dry, and when plants not infected remain erect and fresh-looking. At first the blade of the leaf droops on its stem in the sunshine, but partly recovers at night. (Fig. 2.) After a few days the blade wilts and hangs down limp and flaccid around its stem or petiole. (See Fig. 3.) In a few days more it withers and turns brown and dry like parchment. The leaf stem dies and dries up slowly from the top downward, but remains erect, wrapped by the withered leaf blade. The disease progresses in the vine in the direction of growth and kills the leaves in succession. (Fig. 4.) The plant may die or may continue to bloom from the upper axils, and some fruits may set; but these wither or reach a length of a few inches or they become distorted and deformed.

The characteristic bacilli are found in great numbers in all parts of the diseased and wilted plants, in root, stem, leaf, flower, and fruit.

Cucumber fruits may attain a large size and good shape and then be overtaken by the disease. At first sight such fruits appear fair and sound, but on looking closer translucent areas are seen mottling the rind, and when the underlying translucent tissue is crushed, it draws out in slimy threads. On breaking the fruit across, the vascular bundles, which traverse the fruit lengthwise, are found to be softened and slimy. The seeds may be full sized, but they also are slimy, and when examined are found to be loaded with the bacteria which cause the disease. Healthy plants of cucumber, musk-melon, and summer squash were inoculated with pure cultures from wilted vines of winter squash and cucumber, and these inoculated plants wilted.

We have found a short and easy way by which the gardener can determine whether or not his vines are suffering with this bacterial wilt. First, break a wilted vine, and if the juice is slimy and draws out in slender threads from the broken ends it is safe to conclude that this wilt disease is at work; but if not, or if further evidence is wanted, proceed as follows: Gather some young, tender fruits of squash, pumpkin or cucumber from healthy vines, break off a piece of stem from a wilted vine, take a wire, or better a hat pin, heat it red hot, let it become cold and thrust it first into the broken end of the piece of stem from the wilted vine and then into the young fruit. Another good way is to cut into and break open a young fruit, heat the pin red hot and let it become cold, thrust it into the broken end of a piece of wilted stem, and then use it to scratch and puncture the broken surface of the young fruit. If more than one wilted vine is to be tested, the pin or wire must, of course, be heated

red hot before beginning a new test, otherwise the bacteria from the first may be carried over into the second test. Put the inoculated fruits into a pail with a wet cloth in the bottom, cover the pail and set it aside for four or five days.

Bacterial cucumber wilt will be indicated as follows: There will be a pearly white, viscid, bead-like drop of bacterial growth exuding from the punctures and a sharply defined, cylindrical, water-charged portion or core around each puncture. If this translucent tissue be touched it will be found slimy and will draw out in slender threads. The scratches on the broken surface of the young fruit will show a watery discoloration of the tissue for some distance on both sides of the scratch and there will be small pearly white drops or beads of viscid growth, dotted over the discolored area but not beyond it. Later, this white, viscid growth appears along the scratch, and the bead-like drops increase in size and run together. After some days longer the whole fruit softens into a slimy mass. If these symptoms develop in the inoculated fruits, the gardener may be assured that his vines are suffering from bacterial wilt, and he may as well pull up the wilted vines and burn them. To prevent its farther spread, he should take measures to destroy the squash bugs and the striped cucumber beetles; for Erwin F. Smith has found that these insects carry the germs from diseased to healthy plants.

It may be that the seeds sent out by seedsmen carry with them the living germs of the disease and that these germs can live in the soil of the garden from season to season.

BLACK ROT OF THE CABBAGE. (Caused by *Pseudomonas campestris*). The bacterial disease of the cabbage and related plants, known as Black Rot, has been prevalent for some years at the College and in the neighborhood. This season it has done injury to early and late cabbage and cauliflower in the garden of the Horticultural Department and in other gardens in the vicinity. It was also found affecting, but not seriously injuring, a field of rape belonging to the Farm Department. A large field of Swede turnips on a farm near the College was also affected. Near the College are two neighboring gardeners, one raises his own cabbage seed and in his field we could not find a single cabbage infected with Black Rot. He says that his cabbages have never had this disease. His neighbor about half a mile distant buys seed each season and over 90 per cent. of his cabbages were affected this season. Some plants were killed outright, and many were so injured as not to form heads. He says that his cabbages have suffered from the disease for many seasons. He returns the refuse from the cabbages to the soil, a bad practice, as it seeds the soil with the rot organism.

A BACTERIAL DISEASE OF THE BEAN. (Caused by *Pseudomonas phaseoli*). This bacterial disease of the bean has not been prevalent during the past season at the College. However, a small plot of beans seriously affected with this disease was observed near the College. The owner of the garden said that beans had not been grown on that ground for many years, never to his knowledge. The seed, which was advertised as a novelty, was bought in Hamilton. It may be in this case that the germs of the disease were carried in the seed.

FIRE BLIGHT. (Caused by *Bacterium amylovorum*). The blight of the pear and apple has been observed this summer at the College and in neighboring orchards, and also in numerous other parts of the Province. At the College it has been found affecting the apple, pear, and Mountain Ash. (Figs. 5 and 6). From all of these trees the bacterium causing the disease has been obtained in pure culture, and successful inoculation experiments have been carried on. The bacterium has been isolated in pure culture from blighted leaves of the pear and inoculated into young, healthy shoots of pear trees

where it soon causes typical blight. The same bacterium has been isolated repeatedly from apple trees affected with "twig blight", and the inoculation has produced blight in the growing shoots of the pear and quince. In like manner, the germ isolated from the Mountain Ash caused blight when inoculated into pear shoots. For further information regarding Fire or Twig Blight and some other bacterial diseases of plants, see Bulletin 137, published by the Ontario Department of Agriculture, Toronto.

SOFT ROT OF CAULIFLOWER AND CABBAGE. (Caused by *Bacillus oleraceae*.) This disease, which was fully described in Bulletin 136, was present in several gardens in this vicinity during the past season. It occurred alone, and not associated with the Black Rot of the Cabbage.

THE EXPERIMENTAL WORK OF THE BACTERIOLOGICAL DEPARTMENT FROM 1895 TO 1903.

About 1893, the Experiment Station of the University of Wisconsin appointed a Bacteriologist to investigate problems connected with the Dairy Industries of that state, and to give lectures and demonstrations to the agricultural students. Shortly after this appointment, the present Minister of Agriculture for the Province of Ontario, the Hon. John Dryden, visited Madison, Wisconsin, and was so impressed with the value of the instruction given there in pasteurizing milk and general dairy bacteriology that he thought it necessary to organize a bacteriological department at the Ontario Agricultural College. This led to the installation of a Bacteriological Laboratory at the College; but it was not until 1899 that the Bacteriologist devoted his whole time to the subject of Bacteriology. For the four years, 1895-1898 inclusive, all the microscopical work conducted at the College was done in the bacteriological laboratory; this included animal and vegetable histology, cryptogamic botany and plant pathology, and for several terms instruction was given in systematic and physiological botany and plant breeding. These subjects are now taught in the departments to which they rightly belong, and the services of at least two instructors are now required to give the above mentioned subjects the attention they deserve.

During these years, in which botany engaged so much of our attention, two bulletins were published, "The Grasses of Ontario," and "The Weeds of Ontario". The latter, revised by Prof. Lochhead, has just been reprinted by the Ontario Department of Agriculture. In addition to the preparation of these bulletins, some work was also done on the fungous diseases of greenhouse crops; on the effect of spraying Bordeaux mixture on foliage, and on fruit preservatives for exhibition purposes.

Mention must also be made of a large collection of microscopical material, consisting of various stems, roots, leaves, buds, ovules, embryos, which were prepared, stained, and imbedded in paraffin, and cellulodin for class work. A part of this collection of over 250 specimens was subsequently transferred to the Biological Department, and many of our present students are still using portions of this collection.

In 1896 research work in Dairy Bacteriology was started, and a short paper on the bacterial contamination of milk was contributed to the College Report for that year, and owing to the great importance of the Dairy Industry of the Province, more or less investigation of some phase of dairy work has been in progress ever since.

In 1898 a Thistle milking machine operated by steam power was in more or less constant use in the College Dairy stable. This machine operated naturally, quickly, thoroughly, and without any annoyance to the cow; and many

opinions were expressed by various Dairy associations that the use of the machine would strike a blow to hand milking, and further that the use of the machine would guard against the entry of all dirt, and that "machine milk" would be absolutely filth free, and consequently little or no souring would occur. In order to settle all dispute, the purity of the milk was tested—by bacteriological methods—immediately after being drawn by hand and also immediately after being drawn by the milking machine. The result of 235 analysis of "machine-drawn milk" gave an average of 153,000 bacteria per cubic centimetre, while the average of 98 analysis of the hand-drawn milk gave 12,000 bacteria per c.c. Further experiments showed that machine-drawn milk contained very many injurious species of bacteria which seriously impaired the flavor of butter and cheese made from such milk.

The investigations of bacterial life in normal and abnormal cheddar cheese may be grouped together. Of late years, no subject has awakened greater interest than an explanation of the curing or ripening changes which occur in normal cheese. As a result of numerous investigations of cheeses made in the United States, England, Switzerland, etc., we know a great deal about the changes which occur when cheese ripens, that is to say, when it changes from an insoluble, indigestible, tasteless mass to a soluble, more readily digested, palatable product. These changes are brought about by the digestive action of rennet, which is favored by the growth of the lactic acid bacteria in cheese. The investigational work on the particular type of cheese made in Canada related to the number and kind of bacteria which were present in the cheese. Numerous samples of cheese obtained from all over Ontario were bacteriologically examined in order to obtain information as to the normal bacterial flora. Following this work, a quantitative determination of the lactic acid bacteria was made in a series of cheeses analysed at various ages, and the result of this work was summarized and published in the Transactions of the Canadian Institute for 1900.

The interest aroused by the good results of the cool curing and cold curing of cheese suggested further experiments in order to find out the effect of various temperatures upon the bacterial life in cheese. In this work, we had the co-operation of Dr. Connell, Professor of Pathology of Queen's University, and as a result of more than 300 analyses of cheese cured at different temperatures we were able to announce "that the bacterial content of cheese remains high for the longest time, and the decline is also most gradual, in cheese kept in ice cold storage at an average temperature of 40 degrees F. In cheese kept in a cool well-regulated room, similar results occur but the decline in the number of bacteria is more rapid. As this higher bacterial content constantly corresponds with a better flavor in the cheese, we infer that it is the chief factor in determining the flavor of cheese made from good pure milk."

A number of studies of abnormal fermentations of cheese have also been made. The most extensive of these had reference to an infection known as "bitter" cheese. An organism new to science was discovered which produced this affection, its habitat, life history and cultural peculiarities worked out and remedial measures suggested. Other so-called "cheese diseases" have been investigated, such as the abnormalities known as "mottled cheese", "fruity cheese," "rancid cheese." In the last named trouble, the infection was found to be a bad water supply.

The constant presence of bacteria in freshly drawn milk is a matter of considerable importance, as it explains the ineffectual attempts to obtain milk in commercial quantities uncontaminated by bacteria. The bacterial flora of freshly drawn milk has been the subject of several of our investigations. Samples of fore-milk of a number of cows were carefully collected in sterile tubes

and studied as regards the number and species of bacteria present, and evidence was brought forward which pointed toward bacterial infection by way of the blood or lymph rather than through the teat.

The efficiency of several makes of continuous pasteurizers operated at different temperatures was the subject of a number of tests. The average number of bacteria per cubic centimetre found in milk pasteurized at 140 degrees F. was 631,000, at 160 degrees F. was 17,800, at 185 degrees F., was 81, and at 195 degrees F. was 40, and as a result of these tests, pasteurization of milk at 185 degrees was advised as the best method of securing uniformity, keeping quality, and the mild flavor requisite for export butter.

Several years ago, clarified milk, or milk that has been passed through a separator, was quite extensively advertised by some milk dealers. They claimed that this operation reduced the number of bacteria and enhanced the keeping quality of the milk. This claim, however, was at variance with the reports of a number of investigators, who showed that centrifugation did not decrease the number of bacteria in milk. At the suggestion of the Ontario Department of Agriculture, we investigated this subject, and averaging the results of 240 analyses found that there were 400,000 bacteria per cubic centimetre more in centrifuged milk than in the same milk before centrifugation. Further, there were nearly 25,000 more liquefying (putrefying) bacteria per c. c. in the centrifuged milk. This paradoxical result is explained by the fact that bacteria in milk exist in clumps and masses and the centrifugal force breaks up and distributes them through the milk. These results fully confirmed those of other investigators.

Ontario, as well as other countries, has long suffered from a disease of bee larvae, known popularly as "Foul Brood," and the destruction of bee stock by this disease and the discouragement arising therefrom, has been one of the greatest influences that has retarded the development of the bee industry. Although this disease has been known since the time of Aristotle (B. C. 340) it was not until the year 1885 that the true cause of the disease was discovered. This disease has been studied in our laboratory by bacteriological methods, and we also had the opportunity of comparing the various characteristics of the disease as it occurs in Europe and America. Additional facts in the life history of *Bacillus alvei*, the cause of Foul Brood, were discovered, the various methods of cure were compared and explained, and a new remedy, known as the formalin treatment, suggested, which has given excellent results.

We have also given a little study to that important disease, tuberculosis.

First, we may mention the preparation of a tuberculin which would give reactions in animals extensively diseased, and also in animals which have been previously inoculated with tuberculin in order to mask the effect of an official test. Owing to the lack of a proper isolation stable, this work had to be stopped when we were on the point of obtaining important results.

A number of tests of milk coming from tubercular cows have also been made. Our results corroborate the conclusions of Rabinowitch and others,—that the milk obtained from cows, which react to tuberculin, but which do not show clinical symptoms of tuberculosis or tubercular mastitis, may contain the tubercle bacillus in sufficient numbers to cause death in guinea pigs inoculated with it.

Two investigations have been made on the duration of the life of the tubercle bacillus in Emmenthaler and Cheddar cheese. The results of these experiments showed that the tubercle bacillus died out between the thirty-third and fortieth day in cheese made after the Emmenthaler method, and between the sixtieth and sixty-second day in cheese made after the Cheddar method, and hence if the latter cheese happened to contain tubercle bacilli naturally pres-

ent, it may be assumed that none of these bacteria will be living when the cheese becomes ten weeks old. Therefore, no danger need be apprehended of acquiring the disease known as consumption by eating well cured Cheddar cheese.

During the last five years, we have made more than 500 post mortem examinations of diseased fowls. About 300 of these examinations were made on fowls suffering from, or dead from, a disease which is commonly called "Roup." From the careful study of these diseased fowls, and also from the inoculation experiments with healthy fowls and pigeons, we were able to show the infectious nature of the disease. We were also able to produce the disease, with all its varied symptoms, by the inoculation of a new germ which was isolated from diseased hens, and which we have named *Bacillus cacosmus* (ill-smelling), into the tissues of healthy fowls and pigeons. We have also produced Roup by the inoculation of another organism, which is well-known as the blue pus germ, *Bacillus pyocyaneus*, and hence we have regarded Roup as simply a complex suppurative process which differed from ordinary forms of suppuration in that the pus in fowls appeared in the form of a solid, cheese-like, yellowish white mass, without any tendency to become soft or liquid, or to perforate the surrounding skin. Methods of prevention were advocated and a treatment suggested by which the milder forms of the disease could be cured.

In this connection, we may also mention experimental work on the supposed identity of human and avian diphtheria. We have shown that diphtheria antitoxin inoculated into birds suffering from fowl diphtheria produced no practical or permanent results, and the inoculation of healthy fowls with human diphtheria bacilli showed that this bacillus was not disease producing for hens.

This evidence, together with the isolation of the Roup bacillus, *B. cacosmus*, and the blue pus germ, *B. pyocyaneus*, and the production of typical fowl diphtheria by the inoculation of either of these bacteria into healthy birds, showed life unsoundness of the theory of those who believed in the identity of human and avian diphtheria.

Although one important bacterial disease of plants has been known in Canada for some years, yet comparatively little study has been given to plant affections induced by bacteria.

During the last year or two, however, we have recognized some five or six bacterial plant diseases in Ontario, some of these are well known in the United States, but one of them is a new disease, which has been worked out in this laboratory. This disease is a soft rot which has done much damage to cauliflowers, cabbages, and white turnips, and is caused by a bacillus (*B. oleraceae*) which has the power or property of dissolving the cell wall of the infected plant, thus separating the cells and breaking them down into a soft, pulpy mass.

Several other diseases of this nature have been investigated, and further research along these lines is at present in progress.

I cannot close this article without recording my appreciation of the efforts of my former assistants, Messrs. McCallum, Ross, Streit, and my present assistant, Barlow, who have labored with dexterity, skill, and readiness in the various research work which the Bacteriological Department has undertaken. I have in writing this paper used the plural "*we*" in order to include these gentlemen, and I append a list of the more important papers, etc., published, which will give some idea of the work that has been done and in which, as will be seen, some of my assistants have shared:

Bacterial Content of Hailstones, by F. C. Harrison. Botanical Gazette 1898. 26. No. 3.

Le Lait trait a la machine et lait trait a la main, by F. C. Harrison. *Annales de Micrographie*, 1898, No. 11 and 12.

Tuberculosis in Cattle, by F. C. Harrison. *Special Bulletin*, Toronto, 1897.

La duree de la vie du bacille de la tuberculose dans le Fromage, by F. C. Harrison. *L'Annuaire Agricole de la Suisse*, 1900.

Foul Brood of Bees, by F. C. Harrison. *Ont. Agri. Coll. Bull.* 112. Toronto, 1900.

La Loque des Abeilles. Nyon. (Suisse). 1901. Also in German and Russian.

The Agglutinating Substance, by F. C. Harrison. *Centralblatt fur Bakteriologie I.* 1901, 30 No. 3.

The Duration of the Life of the Tubercle Bacillus in Cheese, by F. C. Harrison. 19th Report of the Bureau of Animal Industry, Washington, 1902.

Yeast and its Household Use, by F. C. Harrison. *Ont. Agr. Coll. Bulletin* 118, Toronto, 1902.

Pasteurization of Milk for Butter-making, by F. C. Harrison and H. H. Dean. *Ont. Agri. Coll. Bulletin* 117, Toronto, 1902.

Bitter Milk and Cheese, by F. C. Harrison. *Ont. Agri. Coll. Bulletin*, 120. Toronto, 1902. (Also in French).

The Bacterial Flora of Freshly Drawn Milk, by F. C. Harrison and M. Cumming. *Journal of Applied Microscopy*, V., Nos. 11 & 12, VI. No. 1.

Ripening of Cheese in Cold Storage Compared with Ripening in the Ordinary Curing Room, by F. C. Harrison, H. H. Dean, and R. Harcourt. *Ont. Agri. Coll. Bulletin*, 121, Toronto, 1902.

Preliminary note on a new organism producing Rot in Cauliflower and allied Plants, by F. C. Harrison. *Science*, N. S., Vol. XVI; p. 152, 1902.

The Ripening of Cheese and the Role of Micro-organisms in the Process, by F. C. Harrison. *Transactions of the Canadian Institute*, 1900-1, pp. 103-134.

Roup, by F. C. Harrison and H. Streit. *Ont. Agri. Coll. Bulletin*, 125 Toronto, 1902.

The Supposed Identity of Human and Avian Diphtheria, by F. C. Harrison. *Proceedings of the American Public Health Association*, 1902.

Proceedings of the American Public Health Association, 1902.

The Bacterial Contamination of Milk and its Control, by F. C. Harrison. *Transactions of the Canadian Institute* 1902-3, pp. 467-502.

Bacillus mesentericus et B. alvei, by F. C. Harrison. *La Revue Internationale d'Apiculture*, 1903, No. 2.

Bacterial Content of Cheese Cured at Different Temperatures, by F. C. Harrison and W. T. Connell. *Ont. Agri. Coll. Bulletin* 130. Toronto, 1903.

Roup: An Experimental Study, by F. C. Harrison and H. Streit. *Ont. Agri. Coll. Bulletin*, 132. Toronto, 1903.

Some Bacterial Diseases of Plants Prevalent in Ontario, by F. C. Harrison and B. Barlow. *Ont. Agri. Coll. Bulletin*, 136. Toronto, 1904.

A Bacterial Disease of Cauliflower and Allied Plants, by F. C. Harrison. *Ont. Agri. Coll. Bulletin*, 137. Toronto, 1904.

Reports of the Bacteriologist, by F. C. Harrison. *Ont. Agri. College Annual Reports* 1896-1903.

I have written this article on the experimental work of the Bacteriological department to call attention to the diversity of our work, and as a plea for a larger and more modern building. In addition to the research work, our routine work—the preparation of tuberculin, pure cultures of lactic acid bacteria for the use of dairy men, nitrogen-fixing bacteria for the inoculation of legumes, and the examination of various substances and material submitted

for diagnosis, etc.) needs much space, and the laboratory is not large enough for this; and when in addition we have classes and laboratory work for an increasing number of students, it shows that the time has come for the erection of a new building to be devoted to bacteriology.

Last year I pointed out what a number of the United States Agricultural Colleges were doing, spending from \$30,000 to \$50,000 on new Bacteriological laboratories, and I understand that the new Agricultural College, founded by Sir William Macdonald for the English speaking residents of the Province of Quebec, is to have a modern and well equipped laboratory for bacteriological research.

Hoping that the coming year will see the commencement of a new Laboratory.

I have the honor to be,

Your obedient servant,

F. C. HARRISON.

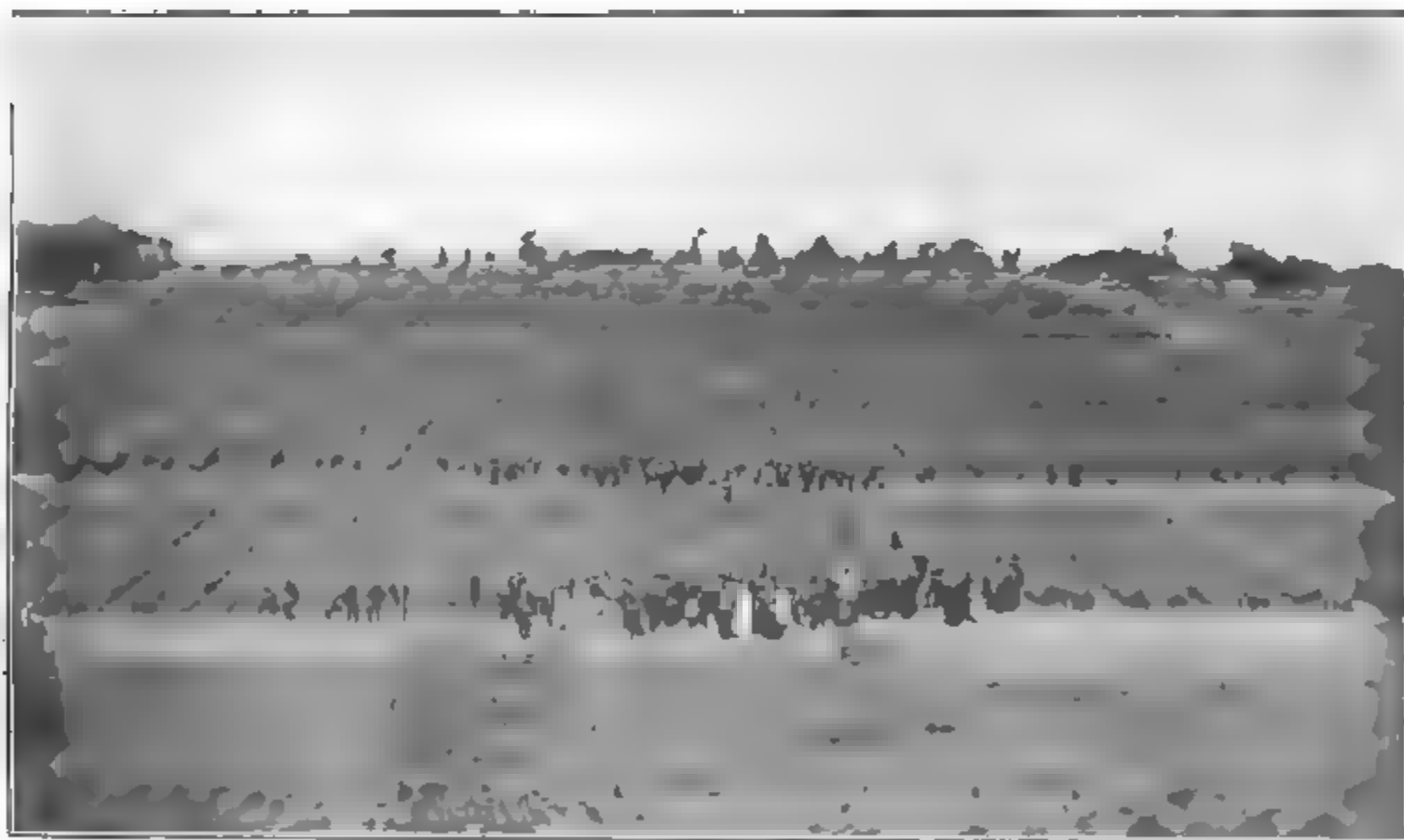
PART XIII.

PROFESSOR OF FIELD HUSBANDRY AND EXPERIMENTALIST.

To the President of the Ontario Agricultural College:

SIR,—I have the honor of submitting herewith my report of the work done in the department of Field Husbandry for the year 1904. This is my eighteenth annual report since I became connected with the experimental work at the College, my twelfth annual report as Director of the Experimental Department, and my first report as Professor of Field Husbandry.

The growth of the experimental work from 1886 to 1904 is shown by the fact that the number of experimental plots has been increased from fifty-four to about two thousand. During this same period, the co-operative experimental work has been increased from twelve experimenters in 1886 to four thousand and fifty experimenters in 1904. I am grateful for the confidence placed in me, as shown by the fact that, besides the directorship of the experimental work at the College and that of the co-operative experimental work in agricul-



A partial view of the Experimental Grounds. Practical Farmers receiving Practical Information along the lines of Practical Agriculture

ture throughout Ontario, I have also been placed in charge of the lectures in field agriculture or agronomy at the College. I appreciate the honor thus conferred upon me, and earnestly hope that the prosecution of the work along these three very important lines may not prove too heavy a task, but that it may be gradually and substantially developed along the right lines.

The division of the work of the College Department of Agriculture into Animal Husbandry, under Prof. Day, and Field Husbandry, with myself in charge, has occasioned some changes in the staff of the Experimental Department. Mr. John Buchanan, B.S.A., who was formerly Specialist in plant breeding, was advanced to the position of Demonstrator; Mr. W. J. Squirrell, who was assistant experimentalist, was advanced to the position of Specialist in plant breeding; and Mr. H. G. Bell, the student who was highest in general proficiency of the junior class of last year, was appointed assistant experimentalist. These gentlemen, as well as the foreman, Mr. A. E. Whiteside, and the stenographer, Miss M. Laughlin, have all shown a deep interest in the work of the department, and have rendered excellent service within the past year.

OUTLINE OF THE WORK IN FIELD HUSBANDRY, FOR 1904.

(1) The delivering of lectures to the students taking the four-year course, which is outlined in the College circular; also to the students taking the dairy course, those taking the short course in stock and grain judging, and those taking the Nature-Study course at the Macdonald Institute.

(2) The delivering of lectures to various gatherings of farmers, as indicated by the following: Fifteen or twenty in the experimental grounds to the thousands of excursionists who visit the College in the month of June; three at Seed Fairs at Guelph, Milton, and Markham; two at the Model Fair at Brome, Que.; one at the Provincial Winter Fair, Guelph; one at the Eastern Winter Fair, Ottawa; one at the annual meeting of the Canadian Fairs' Association, Toronto; two at the Ontario Agricultural and Experimental Union; one at the Niagara County Farmers' Club in New York State; one at the Plant Breeders' Convention at St. Louis, Mo.; and one at the annual meeting of the American Association of Farmers' Institute Workers at St. Louis, Mo.

(3) The conducting of practical experiments in field agriculture on about 2,000 plots at the Ontario Agricultural College.

(4) The carrying on of quite an extensive system of plant breeding, including both systematic selection and cross fertilization. In connection with the work in plant breeding, the discoveries of Mendel, as well as the investigations of De Vries, Bateson, and Correns are taken into consideration.

(5) The directing of co-operative experiments on 4,050 farms throughout Ontario. The report of the results of this co-operative work can be found in the Annual Report of the Ontario Agricultural and Experimental Union.

(6) The furnishing of plans, seeds, and instructions for illustration plots on the exhibition grounds at Simcoe, Whitby, Renfrew, Owen Sound, and Richmond.

(7) The writing of agricultural reports and articles. This includes the reports of the Experimental Department of the College and of the co-operative experimental work throughout Ontario, and the agricultural articles which are sent to the farm journals and newspapers occasionally throughout the year.

(8) The carrying on of a heavy agricultural correspondence. During a part of the year, the letters received daily number between one and two hundred. Many enquiries on agricultural subjects are received, which require much thought and care in answering.

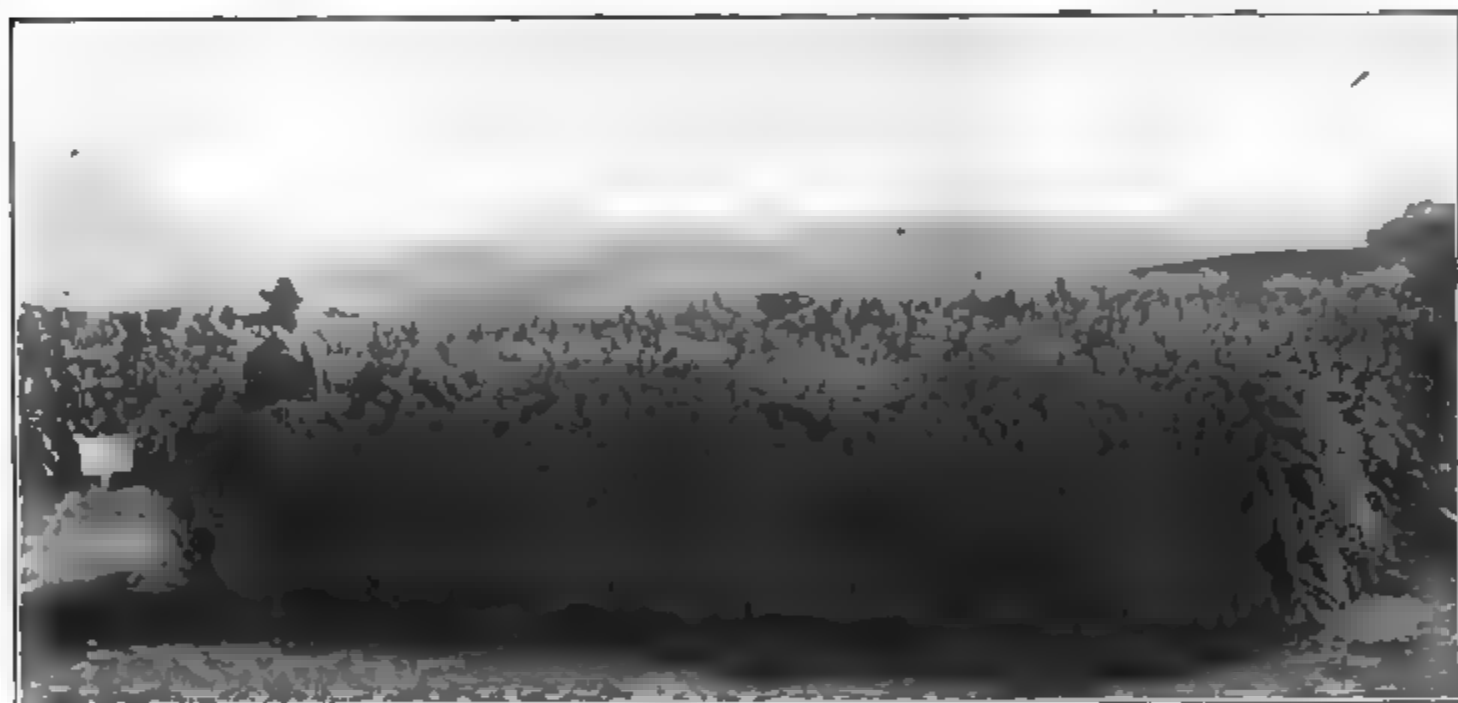
(9) The judging of farm crops at agricultural exhibitions. In 1904, the writer acted as judge on farm crops at the Canadian National Exhibition, Toronto; the Eastern Winter Fair, Ottawa; the Provincial Winter Fair, Guelph; the Fall Fair, Guelph; the Fall Fair, Brome, Que.; and the Annual Seed Fair, Guelph.

(10) The assisting in the establishment of the Canadian Seed Growers' Association which was formed out of the Macdonald-Robertson Seed Growers'

Association within the past year. At a meeting of the representatives from different parts of the Dominion, which was held in the city of Ottawa in the month of June, the writer was appointed a member of the executive board of the new organization, and acted as chairman of the committee which decided on the constitution and by-laws to govern the Canadian Seed Growers' Association. The Ontario members of this Association held a meeting in Guelph on the 7th of December, at which the writer was chairman.

EXPERIMENTAL WORK AT THE AGRICULTURAL COLLEGE.

The work in the Experimental Department consists in planning the various experiments; laying out, seeding, and looking after the field plots; harvesting, threshing, weighing, and testing the grain; taking up, weighing, counting, testing, and storing the potatoes and roots; cutting, weighing, and harvesting the grass, corn, and fodder crops, etc., and also in picking by hand the samples of grain grown on the plots, some to be sown on the plots the following year, and some to be distributed for co-operative experimental work throughout Ontario. But few people realize what a large amount of very careful thought is required in planning, supervising, and examining these plots, and in studying, comparing, and summarizing the results for presentation in reports, bulletins, newspaper articles, and lectures.



Japanese Barnyard Millet grown on Exhibition Grounds at Brome, Quebec, from seed furnished from the Ontario Agricultural College.

EXPERIMENTAL GROUNDS. About fifty acres of land, divided into about 2,000 plots, is used for agricultural field experiments, conducted with varieties of grain, roots, tubers, grasses, clovers, fodders, silage, and miscellaneous crops; with artificial, green, and farmyard manures; with methods of cultivation, selection of seed, dates of seeding, etc.,—all with the greatest care, and for several years in succession—in order to secure strictly accurate and reliable results. These experiments deal with the crops grown on over nine-tenths of the cultivated land in Ontario, that is, fully 10,000,000 acres.

EXPERIMENTAL PLOTS. The experimental grounds have a gentle slope towards the southwest, and the soil is what might be termed an average clay loam. Nearly one-quarter of the land is manured each year with twenty tons (about twelve loads) of farmyard manure per acre. It will thus be seen that the most of the land receives farmyard manure once every four years. No

Comparative Yields of Spring Grains Sown on Six Dates One Week Apart Commencing as Early as the Land was Dry Enough for Sowing.

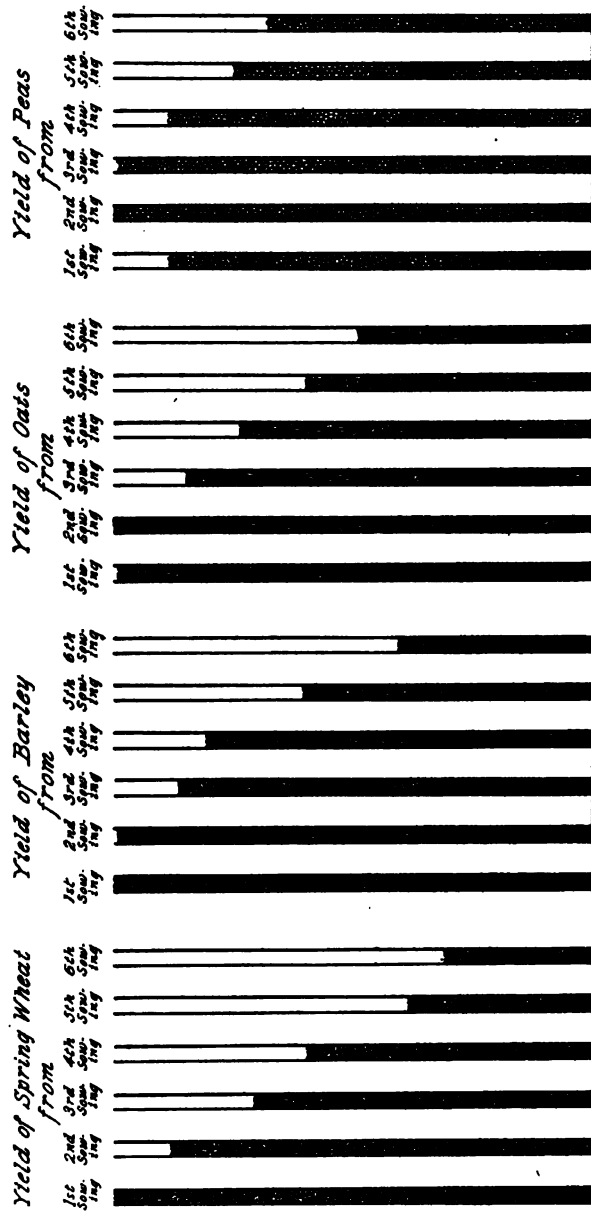


Diagram illustrating one of the cases in the Agricultural Museum at the College, showing the average of Five Years' result in sowing
Spring Grains at different dates.

commercial fertilizers are used except in distinct fertilizer experiments, which occupy from two to three acres each year, and on which tests are made to ascertain the comparative value of different fertilizers with different crops. The plots vary in size according to the requirements of the different experiments, and the yields per acre are determined from the actual yields of the plots in every instance.

RESULTS OF EXPERIMENTS.

All our field experiments are conducted for at least five years before any of them are dropped. For the results of many of the tests which were carried on for five years previous to 1904, the reader is referred to former reports. The results of some of the experiments which have as yet been conducted for only one or two years have been held back until the tests could be carried through at least another summer. As different seasons vary so much in temperature, amount of rainfall, etc., the average results of experiments continued for several years are of much greater value than those secured from only one year's work. We have submitted in bulletin form the results with much confidence in their reliability, and in their real practical value. The writer has had good reason to believe that the work of the Experimental department is being appreciated by the farmer of the Province, and that the results are being studied more and more each succeeding year. I have limited my remarks on each separate experiment, the results of which are presented in Bulletin No. 140, to a few of the points which seem to be of the greatest value to the agriculture of Ontario.

The table of contents of the bulletin is here presented, in order that the reader may know whether or not the information which he wishes to secure is likely to be found in the bulletin, copies of which can be obtained from the Department of Agriculture, Toronto, Ontario.

Experimental Work at the Agricultural College	Sunflower Seed
Results of Experiments.....	Flax Seed
Conditions of the Weather During the Past Summer	Sowing Spring Grains on Six Different Dates
Fluctuations in the Areas of Farm Crops in Ontario	Growing Grains in Mixtures for the Production of Grain and Straw.....
Yields per Acre of Different Classes of Grain	Mangels
Barley	Sugar Beets
Oats	Field Carrots
Wheat	Swede Turnips
Rye	Fall Turnips.....
Buckwheat	Parsnips
Field Peas	Kohl Rabi
Field Beans	Potatoes
Soy, Soja, or Japanese Beans	Corn for Fodder and for the Silo
Horse Beans.....	Sorghum for Fodder
Grass Peas.....	Sunflowers for Fodder.....
Cow Peas.....	Millet for Green Fodder and for Hay ...
Hairy Vetches for Seed.....	Rape, Kale, Cabbage, etc.....
Alfalfa for Seed Production	Green Fodder Crops
Corn for Grain.....	Winter Sowing of Winter Rye, Hairy Vetches, and Crimson Clover for Fodder Production.....
Sorghum for Seed.....	The Wild Vetch as a Fodder Crop
Millet for Seed	Annual Crops for Pasture Purposes.....
	Grasses and Clovers.....

Respectfully submitted,

C. A. ZAVITZ.



One of about fifty companies of farmers who visited the Experimental Plots in the month of June.



Class of students at the close of a practical lesson in grain judging.

PART XIV.

THE MANAGER OF THE POULTRY DEPARTMENT.

To the President of the Ontario Agricultural College:

SIR,—I have the honor to present herewith the report of the Poultry department for the year 1904.

The usual course of lectures was given to the regular College students. The time allowed for this work, according to the time-table as now issued, is not sufficient to give the students as many lectures as the subject requires.



The poultry industry during the past few years has grown, and the interest taken in it has increased, and I think the subject should be given more attention than has been done heretofore.

The attendance at the Short Course in Poultry Raising was as large as we could handle to good advantage. There were some twenty or more students who took the course. Of course much larger numbers than this

can be accommodated for class-room work, but to give students practical work is a difficulty that is hard to overcome where more than twenty-five students are admitted. It might be wise for us to give a year's course, largely on practical work, so as to fit students to take charge of poultry plants for themselves. There are a number of people who are thinking of going into poultry-raising as a business, and who are wanting instruction of this kind.

Special lectures in the Short Course were given by Frank Hare, Quincy, Ill., (formerly of Ottawa); Wm. McNeil, London, Ontario; L. H. Baldwin, Deer Park, Ontario; Newton Cosh, Port Dover, Ontario; W. J. Bell, Angus, Ontario, and A. W. Tyson, Guelph.

The correspondence in connection with the Department has increased from year to year. This, in my estimation, is an indication that the farmers in general are taking more interest in poultry keeping.

Eggs and dressed poultry have sold at prices somewhat higher than in previous years. There seems to be a scarcity of eggs in most local markets. The community at large appears to be consuming more eggs and poultry. This, of course, stimulates our home markets, which is very desirable.

HATCHING EGGS IN JANUARY.

We set a large number of eggs during the month of January, or while the Short Course students were in attendance. The eggs this year varied greatly in fertility. We had eggs from five different breeders in the Province, as well as from our own hens. The eggs were secured from outside parties largely as a matter of noting what effect different systems of housing and feeding had upon the fertility of the eggs. In some instances where the chickens were housed in what might be termed "warm houses," the fertility was extremely low, and in one or two instances no chickens were hatched from the eggs. This, of course, is a very serious loss. We got the best eggs for hatching where the fowls had exercise in the fresh air. The eggs during the past winter did not hatch so well as during the previous winter of 1903, nor were the chickens as thrifty. The hatching of chickens during January has never been a paying proposition at this department, with the exception of one year. The great difficulty is to secure good hatchable eggs and chicks which have vigor. Eggs low in fertility usually hatch chicks low in vitality, which is followed by large losses. Our experience so far would indicate that when eggs are selling at 25 cents a dozen or better, they are more profitable than setting them with a view to the hatching of chickens to be sold as broilers.

LATER HATCHING.

During the natural hatching season, which might be termed the months of April, May and June, we used both hens and incubators for hatching purposes. This is the first year that the hens have hatched a much higher percentage than the incubators. The extremely cold winter appeared to have the effect of lowering the general vitality of the stock, which resulted in a shortage of good hatchable eggs until about the last week in April. We are short of early hatched pullets, and no doubt we will be short of winter eggs.

We used the hens for much the same purpose as in previous years, that is, in hatching eggs laid by individual hens from which we desire to raise as large a number of chicks as possible. These special mating chickens

are all marked between the toes in such a manner as to indicate how the chickens are bred. This is the only satisfactory method that I know of for keeping track of the breeding chicks.

NEW HOUSES.

Various styles of poultry houses have been discussed at length in the poultry press during the past two or three years.

In years gone by, it was considered absolutely necessary to have a warm house in order to get eggs in winter. After many years, experience with this kind of house, poultrymen have found that they were not all that could be desired. There was a tendency for the air in the house to become foul, or what is known by some as "stuffy." The walls in many cases were damp, due to the moisture condensing. Some poultrymen have been of the opinion that these houses lessen the general vitality of fowls, and are in a measure the cause of many poor hatches.

In the past three or four years, the fresh-air houses have been strongly advocated. Some writers have gone so far as to say that all a fowl needs is protection from the wind, and to be kept out of direct draughts, and that the temperature has no influence at all upon egg production. There are also a few who claim that fowls eat no more in a cold house than they do in a warm one. This, of course, appears to be absurd. It is claimed by the advocates of the fresh-air houses that fowls are healthier, more eggs are laid during the winter, and better hatches of stronger chicks are secured during the spring.

With the object of solving some of these problems, there have been constructed at this Department four poultry houses. One of these is what might be termed the "warm house," and is built of matched lumber, lined with paper. There is a dead air space between the inside wall and the outside wall. The building is made tight. The plan adopted to do away with the moisture in the inside of the building is the use of straw as a ceiling. This straw is, of course, placed on boards, which are some six inches apart. It is expected that the straw will absorb the moisture and keep the house dry.

Another house is what is known as the "Maine State" house. This house is practically open to the weather on the front or south side. There are canvas curtains which can be dropped as a protection against wind and snow on stormy days. On other days these canvas curtains are to be kept rolled up, and the fowls allowed to exercise in the fresh air. The ends of the house are single ply matched lumber; the back wall of the house is matched lumber lined with paper and is sheeted again on the inside. This is done in order to make a warm roosting coop, which is protected at night in front by canvas curtains.

The third house is known as the "Closed Pen" style. This house is built much the same as the second house mentioned, but in place of the front side being entirely open to the weather, it has adjustable windows; these windows can be opened or closed according to the weather conditions. This house is considered by many poultrymen to be one of the best styles that has been introduced.

The fourth house is one of the extremely airy ones, being made of boards that are dressed on one side and the cracks battened; about half of the front is open to the weather, but may be closed in on stormy days by large doors. There is not any special protection for the roost; the chickens roosting in this house in exactly the same temperature as they worked during the day. This house, needless to mention, is much cheaper than the other styles.

We hope to experiment with these houses long enough to be able to give definite information as to which is the most favorable for the production of eggs in winter, also in which house the fowls consume the least feed. We hope also to have sufficient data to state whether the fresh-air houses are more conducive of good health and the production of eggs which hatch large numbers of strong chickens, or whether the warm house is equally as good.

AN EXPERIMENT TO FORCE FOWLS TO MOULT.

It has been claimed by some poultrymen that old birds can, by certain methods of feeding, be forced to moult early in the season and would thereby have a full new coat of plumage by October 1st, and would be ready to begin to lay when eggs are scarce.

Three pens of birds were selected with the idea of forcing them to moult if possible. Two breeds of chickens were represented in these pens—White Wyandottes and Barred Plymouth Rocks. Two of the flocks were housed in House No. 1 in the regular breeding pens to which is attached a small grass yard about 14 ft. wide and 80 ft. long. The other pen had practically free range.

The experiment was started the first week in July. The birds were fed less than one-third of the usual quantity of feed; the object being to stop egg production. This method of feeding was continued for two weeks, after which the birds were fed in the best possible manner known. It is claimed that by using a half or less of the usual feed for about two weeks the birds stop laying, after which if the usual quantity of feed is given, they will, in most cases, begin to moult.

In this experiment with the two pens which were confined to small runs, fully 75 per cent. of the hens began to moult the third week of the test. The other 25 per cent. began to lay fairly freely when the heavy feeding had been in progress about a week. The birds that had free range stopped laying but did not commence to moult. When the feed was lessened they simply ranged farther, and, as far as outward appearance was concerned the amount of feed gathered was used in maintaining the body in normal condition, practically no eggs being produced. When the heavy feeding was commenced, they began to lay fairly well, but showed no inclination to moult. In fact these birds were among the last to moult this year.

This experiment would seem to indicate that it is possible to control the moulting season more or less. It might be that the first week in July is a little early to undertake work of this kind. A few of the hens that moulted first began laying in September and moulted a second time in November. This, of course, is a very serious objection. Whether there is anything to be gained by forcing the hens to moult early in the season would depend entirely upon local conditions such as to markets and so forth. If eggs were as high as they have been this season, it is extremely doubtful if it would pay better to have hens moult than to have them produce eggs.

COLD HOUSE.

In the report of 1903 there was an account given of the use of a cold house. It might be interesting to add that the birds in this house in the extreme cold weather of 1903 and 1904 gave very satisfactory results. None of the females in the house had their combs frosted. This seems somewhat remarkable when it is remembered that there were some Single Combed Leg-horns in the pen. Of course the male birds of this variety would freeze their combs very easily; the females seem to be able to stand considerable cold. The temperature in this house registered as low as 10 degrees below zero upon

one occasion only; the temperature went to zero upon half a dozen different occasions. The birds did not produce as many eggs as in the previous season, but still they laid a fair number. We will be able to test this manner of housing much more satisfactorily in the new houses that have been constructed during the year.

GENERAL TREATMENT OF BREEDING STOCK.

The system followed in 1904 is much the same as in 1902 and 1903. We have as yet no reason to change our opinion in regard to airing the houses freely during all seasons of the year. We have found that birds, even of the Leghorn type, will stand much more cold than we had anticipated; that is to say, where they have been kept in moderately cold houses at all seasons of the year. We have also had the experience that the bringing of a bird from a warm house to a cold house is a very bad plan, as the combs and wattles of such birds are easily frozen. Our system of leaving the doors open the greater part of the day is not favorable to the production of eggs in winter from Leghorns, Minorcas and such birds, but is better adapted for Plymouth Rocks, Wyandottes, etc. The usual method of feeding has been followed, and need not be discussed here.

NEW BREEDS OF FOWLS ADDED DURING THE YEAR.

Eggs of the following varieties were purchased during the season: Black Orpington, White Orpington, Jubilee Orpington, Salmon Faverolle, and Brown Favorelle. From these eggs a fair percentage of chickens were hatched. The White Orpingtons and Black Orpingtons hatched a much higher percentage of cockerels than pullets, and unless we can see our way clear to buy females of these breeds, we will not be in a position to maintain a breeding pen of either variety.

As regards growth, the Salmon Favorelle proved to be a rapid flesh forming chicken. As yet we know nothing about their egg production. I am doubtful if they will ever become a popular fowl with the poultry fancier. They might be described as resembling the Houdans, Dorkings, and Brahmas. These three breeds when mixed together certainly do not produce a handsome fowl.

The Jubilee Orpingtons grow very rapidly, and are completely feathered when 39 days old. From general appearances they would make a fairly good chicken for broiler purposes. In early maturity for the production of eggs they have proved themselves to be better than Rocks, Wyandottes, or other Orpington varieties. They did not grow nearly as fast in proportion after ten weeks of age as they did during the first ten weeks of their lives.

We have also added a pen of Rose Comb Brown Leghorns and a pen of Black Hamburgs.

GEESE.

Two varieties of geese have been added to the poultry department. These have been added for the purpose of better instruction to students. In another year we may be able to do a little experimental work with them. Many poultrymen in Ontario seem to think that we will find it rather difficult to get the geese to breed where they have no access to a pond or stream. Next year we will be able to report whether or not we succeeded in getting the geese to breed satisfactorily.

EXPERIMENTS IN FATTENING CHICKENS.

Early in August a grain-sprouting machine was purchased. The manufacturers of this machine claimed that it would make a saving in the feed used and would be profitable for the average farmer to buy. We have experimented with a fairly large number of chickens during the fall, but as yet have not sufficient data to warrant publication. We found considerable difficulty in getting rations that were palatable. For example, a ration made of equal parts of oats, buckwheat, and barley meal when ground makes a fairly palatable ration. These grains when sprouted do not make nearly as good a ration owing to the fact that the chickens in nearly every instance refuse to eat the buckwheat, unless practically starved to do so, in which case little or no gain is made. It will be seen from this that we lost considerable time in finding rations that were palatable. We have found that a ration of equal parts of wheat, oats, and buckwheat works fairly well, both as ground grain and sprouted grain.

We have commenced an experiment with thirty birds which is to extend over one year's time, with the idea of testing sprouted grain, whole grain, and a mixture of sprouted grain and ground grain as feeds for laying hens.

I might add that the sprouted feed is relished by all classes of chickens, and I consider that oats when sprouted are a very palatable feed; in fact, we have experienced no difficulty whatever in getting fowls to eat large quantities of sprouted oats or barley. Sometimes these grains are not very palatable when dry. Wheat is somewhat high-priced at the present time; therefore if we can make oats palatable it will save considerable in the cost of feeding fowls. The sprouted grain also acts more or less as a green food.

This year we followed along much the same lines as last year in regard to testing substitutes for skim-milk in fattening rations. The results of these experiments are given below. The grain ration consisted of equal parts of barley meal, oatmeal, and buckwheat meal. In the skim-milk ration an equal amount of milk was mixed with the grain, or in some cases a little larger amount. With the skim-milk substitutes, 15 per cent. of the ration was made of the substitute used. We have calculated that the grain ration cost \$1.25 per cwt.; the skim-milk 10 cents per cwt.; beef scrap, \$3.25 per cwt.; animal meal, \$2.00 per cwt.; and blood meal, \$2.75 per cwt.

Ration.	No. of Birds.	Weight at beginning of experiment.	Pounds of gain in two weeks.	Pounds of grain consumed.	Cost of grain.	Pounds of grain to make one pound of gain.	Pounds of milk consumed.	Cost of milk at 10c. cwt.	Pounds of skim-milk substitute.	Cost of substitute.	Total cost.	Cost of one pound gain.
Grain	12	58	10	47	58	4.7	50	5	.....	.....	63	6.3
Milk	12	35	16.5	47.75	60	2.9	50	5	.....	.....	65	
Grain	12	55	9	47	58+	5.22	.....	.....	7	14	72	8
and Animal Meal	12	43	12	48	60	4	.....	.....	7	14	74	6.16
Grain	12	57	11	47	58	4.27	.....	.....	7	22	80	7.27
and Beef Scrap	12	40	15.5	48	60	3.04	.....	.....	7	22	82	5.9
Grain and Blood Meal	12	54	12	47	58	3.9+	.....	.....	7	19	77	6.4

Remarks.

From the table it would appear that skim-milk produces a pound of gain cheaper than any of the other rations. The animal meal ration this year did not do nearly so well as last season, and the blood meal ration did better. Last year we had considerable difficulty in getting the birds to eat the blood meal ration, but this year they relished the ration as well as any of the other rations used. The beef scrap makes a good ration, but, as stated in last year's report, is too expensive. It will be noticed that in the two tests given, the amount of gain and also the cost of a pound of gain varies considerably. This is largely due to the relative ages of the chickens. The chickens in the first test were of the Wyandotte breed and were practically matured, as far as growth was concerned. For this reason they would not make as great gains as if they had been put up to fatten perhaps one month earlier. The chickens in the second test were younger and were of the Orpington breed. Being immature, they both grew and put on flesh. This is an important point when buying chickens for fattening purposes. This cannot be considered a breed test. If anything, it is valuable as an indication of which is the more profitable age for fattening chickens. The results of the tests of substitutes for milk simply bear out the facts as printed in previous years, that these foods require several years of careful experiment before we can arrive at definite conclusions. It is possible that those by-products purchased at one time may be more palatable than are those of another shipment. I think this is the case with the blood meal. Some samples of blood meal appear to be much darker in color than others; also some samples appear to be relished by chickens better than others.

The blood meal and beef scrap we purchased from Swift & Co., Chicago; the animal meal from A. J. Morgan, London.

I might add that the skim-milk substitutes have a tendency to produce a yellowish cast to the flesh. Skim-milk, as has been said in previous reports, is one of the best feeds for the production of white flesh.

TESTING INDIVIDUALITY.

The following table will give some idea of the gains made by different individual birds. In selecting birds for experimental purposes, we have always endeavored to get birds as nearly alike as possible. Some types of chickens are, generally speaking, poor feeders. We selected the birds used in a test below from a flock of chickens which would be considered of fair average. Some of them would be called good type, while others were not so much so. It will be noticed that they vary in the amount of gain made, from 2 lbs. 1 oz., to 1 lb. 1 oz.

Leg Band	Wt. Commencement.		Wt. 1st Week.		Wt. 2nd Week.		Wt. 3rd Week.		Gain.	
	Lbs.	Oz.	Lbs.	Oz.	Lbs.	Oz.	Lbs.	Oz.	Lbs.	Oz.
7058	3	0	3	7	4	1	4	11	1	2
7054	3	4	4	1	4	1	4	8	1	4
7087	4	6	4	11	4	11	5	7	1	1
7372	3	.15	4	14	5	3	6	0	2	1
No band.	3	0	3	10	4	3	4	10	1	10
7855	3	12	4	18	5	4	5	18	2	..
7066	3	10	4	2	4	10	4	11	1	1
7091	3	7	4	2	4	9	5	0	1	9
7082	3	15	4	9	5	0	5	2	1	3
7078	3	10	4	4	4	10	5	0	1	6
7064	4	0	4	14	4	14	5	11	1	11
7063	3	1	3	9	4	8	5	0	1	15

Respectfully submitted,

W. R. GRAHAM.

PART XV.

THE LECTURER ON APICULTURE.

To the President of the Ontario Agricultural College:

SIR,—I have the honor of presenting herewith my fifth Annual Report in the department of Apiculture.

The usual course of eighteen lectures was given in the fall term.

During the last two years I have been trying to discover the very cheapest and most profitable method of storing extracted honey. When a large amount of honey is to be stored it is found that the sixty-pound cans, generally used represent a large outlay, and unless sold quickly generally become delapidated. Large tanks, such as are used for water, vinegar or pickles are expensive, and very much more so when they leak. Oak barrels are costly, and if graulated honey is taken out of them it costs nearly as much to cooper a barrel together again as to buy a new one. I have been using rectangular tanks made of flooring (see Report for 1903), the ends and sides of which could be removed after the contents had graulated. Although they were well waxed they sometimes leaked at the corners.

This year, I tried, with entire success, lining these tanks with manilla paper painted with hot paraffin wax. I experimented with dry goods packing cases lined with waxed manilla paper, and found these boxes absolutely proof against leaking.

To store honey in this way, a box must be used, the interior of which is free from any projections which would cut the paper when pressed against the sides of the box. Then a full sheet of manilla paper is laid on the bottom of the box (completely covering it), and another sheet around the interior sides. Where the two ends of this sheet meet in one corner is nailed a carpet strip so as to cover both ends of the paper, and other pieces of carpet strip join the edges of the sheet on the interior sides to the one on the bottom. Manilla paper can be bought in sheets of any length and thirty-six or forty-two inches wide. Then the paper and carpet strips are painted over with hot wax, and wherever the paper is accidentally torn a small piece of shingle is nailed over the break and then covered with wax. This box makes the very cheapest means for storing extracted honey and one that is perfectly safe.

Nearly all bee-keepers strain their extracted honey through cheese cloth. This is a very slow process. The honey runs slowly, especially if it is not very warm, the cloths become clogged with minute particles of wax, and more or less honey is spilled in changing cloths. Others run their honey into tanks; and after the impurities have risen to the surface, they run the clear honey out of the bottom of the tanks. But this cannot be done unless the honey is thin, either from heat or from not being sufficiently ripened. I have made this method very reliable by using a large tin storage can placed out in the sun. The can is painted black so as to absorb heat more readily from the sun. The cover of the can is a wooden frame with glass top, sloping after the manner of a hot bed sash or solar wax extractor, and this glass is kept turned towards the sun. When the sun is strong, the honey becomes very warm, and the small particles of wax and other impurities come to the surface.

Respectfully submitted,

H. R. ROWSOM.

PART XVI.

THE LIBRARIAN.

To the President of the Ontario Agricultural College:

SIR,—As Librarian of the College, I herewith submit a brief report for 1904.

During the year, we have added 1,125 books to the Library, making the total number of bound books on our shelves 12,271. We have purchased back numbers of the following periodicals in order to complete our sets:

Farmer's Advocate, Vols. 14—18, 22.
 Queen's Quarterly, Vols. 3—11.
 Nature, Vols. 1—53.
 Breeder's Gazette, Vols. 1—30.
 Quarterly Review, Vols. 86—188.
 British Bee Journal, Vols. 27—31.
 Journal of Society of Chemical Industry, Vols. 1—18.
 Canadian Magazine, Vols. 1—19.

The 1,125 books added to the Library during the year are classified as follows:

Economics	48	History	40
Literature	58	Hygiene	12
Geography	7	Reports	30
General Science	7	Nature Study	43
Apiculture	9	Entomology	19
Photography	83	Botany	25
Biology	17	Chemistry	58
Physics	18	Bacteriology	20
Poultry	9	Dairying	15
Veterinary	23	Horticultural Reports	7
Horticulture	53	Forestry Reports	3
Forestry	36	Agricultural Reports	60
Agriculture	89		

We desire to acknowledge and express our appreciation of all our exchanges, especially those of the United States Department of Agriculture, and the numerous Experiment Stations in America; Australia, Cape Colony, India, and Europe.

In last year's report, I mentioned that we had begun to make a card index of the publications of the Ontario Department of Agriculture. I am pleased to be able to report that Miss Rowsome has made good progress in this work, and the indexing of all the College bulletins and reports has been completed to date. This index will be extremely useful to the staff and students, as author and subject cards are written for each title, and as much information as possible has been placed upon each card so as to give the person consulting the catalogue a good idea of the manner in which the indexed article is treated. We shall continue this work and hope to have finished by the end of next year the reports of the Fruit Growers' and Dairy-men's Associations.

The portrait of the late J. Hoyes Panton, for sometime Professor of Biology and Geology at this institution, and presented to the College by the ex-students, and the portrait of Dr. Mills, President of the College from 1879 to 1904, presented to the College by the graduating class of 1904, have been hung in the Reading Room and add greatly to the appearance of the room. A memorial tablet to the memory of J. H. Findlay, '92, '93, who was killed at Paadeberg, has also been placed on the wall of the Reading Room.

Miss A. G. Rowsome, B.A., has had charge of the card catalogues and general management of the stack room, and I wish to call your attention to the skilful manner in which she has epitomised and catalogued the numerous articles and subjects in the College Reports and Bulletins.

Mr. W. G. Milligan has had charge of the book delivery and periodical rooms. His duties also include the checking over and putting on file the 150 periodicals the Library receives by purchase or exchange.

I have the honor to be sir,

Your obedient servant,

F. C. HARRISON.

PART XVII.

THE PHYSICIAN.

To the President of the Ontario Agricultural College :

SIR,—I have the honor of presenting to you my eleventh annual report.

During the early months of the year we had more than the usual sickness in the College. First, there occurred on the fourth of January, an outbreak of measles amongst the students, eleven of whom contracted the disease—eight residents and three non-residents. Some of the patients were very ill, and to give them the care they needed we were obliged to secure the services of a trained nurse for a few weeks. Then, in the latter part of the month, the College was invaded by varioloid, with which four students were sent to an isolation hospital. Of these, one developed acute endo-carditis which for a time caused his physician and friends some anxiety, but the others were so slightly ill as to require little or nothing more than isolation. You will so well remember the facts of our experience at that time, and the means adopted for the suppression of the outbreak, that it will be quite unnecessary for me to give any further details. There were also during the winter months many cases of influenza, bronchitis, tonsillitis, and other ailments common in the community. Among these was a rather severe case of facial erysipelas taken to the General Hospital in this city. There were about the usual number of accidents of which I shall mention only the most serious—the crushing of a hand of one of the laundresses in a mangle. For the servants and the students who remained at the College during the summer, I had considerable work to do.

Several changes very important to the health and comfort of the students were made in the College and gymnasium during the summer vacation. I refer especially to the improvements in the swimming bath, to the clearing out of the old urinals and closets and the putting in of excellent modern sanitary conveniences, and to the fitting up of a fine large bath room, with a sufficient number of showers and tubs worthy of a place in the institution, I feel sure that every one interested is thankful for these important advances.

The College opened in September with a very large attendance. I shall not detail all the minor ailments and injuries requiring my attention thus far during the term, but must report a cast of acute pleurisy taken to the General Hospital in September where the patient remained for three weeks before he was well enough to return to his studies. I regret to have to report also a case of acute appendicitis in a student who entered the same institution for operation on the 16th of the present month. The patient though still in the hospital is making good progress toward recovery.

The opening of Macdonald Hall in September has added very largely to my duties. Though in every respect it seems a model residence for young ladies attending College, the one hundred and twenty earnest students of nature and home-making residing therein had their own share of sickness during the autumn. This was perhaps largely due to the unfinished state of the building for a good part of the term, when many suffered

from various mild respiratory diseases and one from pneumonia. I must say, however, that on the whole the health of both residences in common with that of the general public has been remarkably good this fall.

At the beginning of the session you—very wisely in my opinion—made vaccination compulsory. In the discharge of that duty I met with some who very strongly objected, and who stated that they would not have come to the College had they known vaccination would be required of them. In view of such statements, it appears to me only fair that, in future, College Announcements should contain a notice that all students must either bring with them certificates of recent successful vaccination or be vaccinated on admission.

Three times in the last nine years students in some of the departments of the College have been taken ill with smallpox. In my opinion the time has arrived when, in the interests of the institution, an isolation hospital should be built.

Respectfully yours,

W. O. STEWART.

MACDONALD INSTITUTE.

PART I.

THE DEPARTMENT OF HOME ECONOMICS.

To the President of the Ontario Agricultural College :

SIR,—I have the honor to submit herewith my report on work of 1903 and 1904 in the Home Economics department.

EQUIPMENT.

The Department of Home Economics was opened in September, 1903, three months before any part of the Macdonald Institute building was ready for use, and a year before Macdonald Hall was ready for occupation. During the first term the classes were held in rooms of the Chemical Building and the Massey Library. In January, 1904, the classes were moved into the eastern wing of the Macdonald Institute, and the lectures and practical classes were fairly well carried on in spite of many disadvantages resultant from the unfinished state of the building. When the new school year opened in September, 1904, the building was nearly completed, and there are now a sufficient number of rooms adequately equipped for present needs.

The entire second floor of the Macdonald Institute is devoted to the Home Economics work, and consists of two class-room kitchens, one practice kitchen, one pantry, one stock room, two cold-storage rooms, one class dining-room, one large lecture room, one dress-making room, one sewing room, one fitting room, one laundry class room, four office bedrooms, two locker rooms, janitor's room, various cupboards, and a small apartment containing two bedrooms, bathroom, living-room, pantry, store-room and kitchen. In addition, this department shares with the Nature Study and Manual Training departments the privileges of the assembly hall, reception room, reading room, and reference library.

COURSES OF STUDY.

1. *The Normal Course.* This is especially designed to prepare Domestic Science teachers for our public schools, and is a continuation of the work which was carried on in the Ontario Normal School of Domestic Science and Art in Hamilton. It occupies two years; the first year is devoted chiefly to subject matter, and the second chiefly to methods of teaching the subject. The Public School Board of Guelph provides the Institute with four classes of girls, which gives the Senior Normal students excellent practice in teaching.

Following is the outline of the course as given in this year's Announcement :

Junior Year.

Lesson periods are of fifty minutes each.

Elementary Chemistry	2	periods weekly.
Physiology and Hygiene	1	period "
Foods	1	" "
The House	1	" "
Elementary Cooking	6	periods "
Psychology	2	" for one term.
History of Education	2	" " "
General Methods of Teaching	2	" " "
Elementary Economics	2	" " "
Biology	1	period " "
Practice Work	6	periods.
Elective	3	"

Junior Year.

Chemistry of Food	6	periods.
Advanced Cookery	3	" for two terms.
Bacteriology	3	" " one term.
School Laundry	2	"
Marketing	1	period.
• D. S. Methods	1	"
Observation	1	"
Practice Teaching	3	periods.
Physiology and Hygiene	1	period for one term.
Home Nursing and Emergencies ...	1	" " two terms.
Ethics of the Home	1	" " one term.
Elective	6	periods.

The course was opened in December, 1903, with five students in the Senior Class, and nine in the Junior Class. At present we have twenty students in the Senior and seventeen in the Junior Class.

2. *The Two Year Housekeeper Course.* This occupies two years, and was designed for those girls who wished to study the subject of Home Economics with a view to housekeeping in their own homes. The first year work was very similar to that of the Junior Normal Class, but the second year is devoted chiefly to practice in the various branches of housework and housekeeping. Each student in this class is required to act for at least a week as working housekeeper in the department. She is required to keep all rooms in order, to do all necessary marketing, cooking and serving for two people who live in the apartment, and finally to render an itemized account of the money placed at her disposal.

The following is an outline of the course as given in last year's Announcement:

I.—TWO YEARS COURSE IN DOMESTIC SCIENCE.

Subjects:

Foods,	Elementary Biology,
Cooking,	Bacteriology,
Physiology and Hygiene,	Physical Training,
Dietetics,	Psychology,
The House,	Child Study,
Marketing,	Ethics of the Home,
Home Nursing and Emergencies,	Economics,
School Sewing,	History of Education,
Laundry Work,	Methods in Domestic Science.
Chemistry,	

The course was opened in September, 1903, with ten students, of whom five are continuing the second year work. This course was not offered in this year's Announcement, as it was judged desirable to replace it with a shorter course for the present.

3. *The One-Year Housekeeper Course.* This occupies one year, and replaces the two year course. It retains the practical work of the old course, including the Apartment housekeeping.

Following is an outline of the course as given in this year's Announcement:

The House	1	period weekly.
Physiology and Hygiene.....	1	" "
Foods	1	" "
Plain Sewing		
Machine Sewing		
Making of Shirt Waists	4	periods "
Cookery	6	" "
Dietetics	1	period for one term.
Sanitation and Hygiene	1	" " "
House Furnishing	1	" " "
Home Nursing and Emergencies	1	" " two terms.
Laundry	1	" " one term.
Practice	9	periods weekly.
Marketing	1	period for one term.

The course opened in September, 1904, with sixteen students.

4. *The Professional Housekeeping Course.* This course occupies two years, and is designed to train skilled housekeepers. The first year is devoted to general training in the work of an ordinary house; the second to study of the special problems of the professional housekeeper, together with a great deal of actual practice work in the different branches of service in Macdonald Hall.

The course was opened in September, 1904, with four students. These are obtaining their general training along with the Junior Normals and Housekeeper students. Their second year work will be governed largely by the work which they accomplish this year, and is not yet definitely outlined. Only those who give evidence of real executive ability will be permitted to continue, and the diploma will not be granted until each candidate has proven that her professional work is satisfactory.

5. *The Short Course in Domestic Science.* This course is designed especially for those who cannot spend more than one term at the Institute. It provides training chiefly in the practical work of plain cookery, laundry and plain sewing, with simple lectures on food, sanitation, and home nursing, but is thorough as far as it goes. No examinations are held in connection with this course, but regular attendance is demanded.

The first class opened in January, 1904, with fourteen students; the second in April with seventeen students; the third in September with fifteen students. The course is proving popular, as evidenced by the thirty-two students who have been entered for the first term of 1905.

6. *Optional Courses.* These are courses offered to those who do not wish to take full regular courses, or who wish to take a group of subjects fitted to their special needs. There are several subjects offered only as optional, but many of the regular courses may be chosen when there are

vacancies in the classes. Several students this year are taking optional courses in the hope of a vacancy occurring in the One Year Housekeeper course.

Following are the chief optional subjects in the order of their popularity:

Shirt-waist Making—in which the students are taught to cut, fit, and make shirt-waists.

Dressmaking—in which the students are taught to draft their dress patterns; to cut, fit, and make plain dress; and finally to make more elaborate dresses, suitable to the wearer in design and color.

Millinery—in which the students are taught to make folds and bows, and to trim simple hats; to renovate old hats and trimmings, and to make and cover wire shapes.

Machine Sewing—in which the students are taught to use a sewing machine, and the making of white underwear.

Wood-carving—given in the manual training department

Laundry—in which the students are taught the making of soap, treatment of hard and soft water, and the laundering of flannels, bed-linen, body-linen, napery, silk, lace, etc.

Horticulture—twelve lessons given in the Horticultural department.

Poultry Raising—twelve lessons given in the Poultry department.

Home Dairying—twelve lessons given in Dairy department.

There has been little demand for the last three subjects owing to the superior attractions of the various sewing classes, but we believe they will become popular as the nature of the work becomes better known. There are at present twenty-three optional students.

RECIPIENTS OF TEACHERS' DIPLOMAS IN DOMESTIC SCIENCE, 1904.

Miss Enid Robertson,	Perth, Ont.
Miss Isabelle Wright Strong	Hamilton, Ont.
Miss Ella L. Miles	Hamilton, Ont.
Miss Elizabeth MacVannel	St. Marys, Ont.

WOMEN'S INSTITUTE CONVENTION.

Two conventions of the Women's Institute have been held in Macdonald Institute—the first in December, 1903, in the midst of building operations, with an attendance of 200 delegates, and the latter in December, 1904, with an attendance of 300 delegates. Both of these conventions were addressed by different members of our staff.

SUMMARY OF ATTENDANCE.

Enrolled for the year ending June, 1904.

Senior Normal Class	5
Junior Normal Class	9
Two Year Housekeeper Class	10
Short Course in Domestic Science Class	31
Optional Class	13
Guelph Public School Classes	86

Enrolled to date for the year ending June, 1905.

Senior Normal Class	20
Junior Normal Class	17
Professional Housekeeper Class	4
Two Year Housekeeper Class	5
One Year Housekeeper Class	16
Short Course in Domestic Science Class	15
Optional Class	23
Guelph Public School Classes	91

CONCLUSION.

The experience of the past year shows that the townspeople are already, and the country people are rapidly, coming to appreciate the training in household affairs which is offered by the College. It remains for us, therefore, to provide the teachers which are necessary to make the most of our present equipment, and do for the girls of the country what the College is already doing for the boys.

Respectfully submitted,

MARY URIE WATSON.

PART II.

THE DIRECTOR OF MANUAL TRAINING.

To the President of the Ontario Agricultural College :

SIR,—I have the honor to submit to you my first annual report on Manual Training as carried on in connection with the Ontario Agricultural College.

The Manual Training movement owes its inception to the ex-President, Dr. Mills. In January, 1902, Sir Wm. C. Macdonald, of Montreal, through the instrumentality of Dr. Robertson as the administrator of funds, offered to the Premier of the Province of Ontario assistance to carry out a scheme for the betterment of education at rural schools. Dr. Mills made an application to Sir William for assistance towards establishing at Guelph courses of instruction in Manual Training, Nature Study, and Domestic Science.

Early in January, 1903, an equipment to accommodate twenty students in Manual Training was sent from Ottawa. This was temporarily installed in a part of the Museum, on the ground floor of the Biological Building, where eighty-two students received instruction. In the Fall term of 1903 there was no instruction given at the College. The equipment was taken over by the Guelph Board of Education, and classes for the pupils and teachers of the Public Schools were inaugurated under my charge. With the opening of the Macdonald Institute in the Winter term of 1904 the Manual Training department was fitted with an entirely new equipment, and seventy-eight Agricultural students attended the course. Concurrently with these classes a course in wood-carving was carried on, with nine students in attendance. The Spring term opened with seven wood-carving, two regular, and three Saturday morning Manual Training students. On May 30th a special Summer Course in Manual Training, attended by twenty teacher-students, was commenced and continued until July 29th. The Fall term of 1904, which is about to close, has been a particularly heavy one, with six Manual Training, thirty-four Nature Study, and ten Wood-carving students. The work of this department is now dominated by five distinct aims :

1. A course for Agricultural students.
2. An optional course in Wood-carving for Domestic Science students, and others.
3. Consolidated School course.
4. A correlated course for Nature students.
5. A Normal course.

1. THE AGRICULTURAL STUDENTS.

Considerable changes in the course usually followed was found necessary to meet the special needs and demands of agricultural students without losing or destroying the pedagogical value of the instruction. The whole course was planned and pursued on educational lines; the object being not so much the production of material results in the shape of models, as to inculcate habits of accuracy, neatness, and thoroughness through processes pedagogically and technically sound, for whether, and to what degree culture is educative depends materially upon the process of attaining it. There are many mechanical employments, even when pedagogically pursued, of comparatively little educational value, and when not carried out along educational lines are mechanical and stupefying.

If the training of the hand is utilized to influence the mind and moral character of our students, mechanical action must be avoided, at least in the training of our first year students, leaving the acquisition of technical skill

to subsequent years, because in such training of the hand, the movement being repeated again and again the mental activity becomes gradually fixed in the nerves and brain; that is, it is retained by memory until the movement can be performed as it were automatically. Such a mechanical movement is closely related to what is called reflex motion—an action executed more or less unconsciously—it is memory in action devoid of conscious thought exercising little or no influence on the brain.

In our course we sought to keep the intellect out of this abyss of habit, and to make the ethical behaviour more and more a matter of unquestioning habit, for the first machine a man makes is an education to its maker, but the second and subsequent machines made are only a matter of habit. Indeed, if all education be regarded as disciplinary, it is evident that all discipline is not educational. There are certain craft operations, certain kinds of acquired skill, which demand that a man should stop thinking and put himself as nearly as possible in the condition of a machine, and carry through a series of movements like a machine. In estimating the value of a Manual Training course, it seems to me that the beginning must be interpreted from the end, not the end from the beginning. An engineering workshop is unintelligible until we reach the room where the complete engine stands. Everything culminates in that final product, is contained in it, is explained by it. It seems advisable, therefore, that our first year course should be truly educational in its character, allowing it to assume in each succeeding year a somewhat more technical nature.



A Nature Study Class preparing Garden Plots.

The present state of the labor market is a problem which, in the very near future, is destined to wholly change farming conditions and operations. The scarcity of hand labor will encourage the increase of labor saving devices. The greater use of complicated machinery and implements in the various branches of agriculture will demand dexterity of hand as well as of brain power to manage them, and in these days of competition the capacity for handling tools linked to a keen ability for understanding mechanical principles and machinery is vastly more important to a farmer than the mere acquisition of the facts. There is much economic waste going on from day to day on the average farm, and the farmer who is capable of effecting small

temporary repairs to machinery and implements in the height of a busy season, and looking after them properly when the season is over, is the one who will successfully contend with aggressive competition. But the workshop may be made an introduction to a less popular virtue than money making. A place for everything, and everything in its place; a use for everything, and everything ready for its use, is the wholesome economic philosophy of the workshop. What eye accustomed to the tidiness of a well-ordered workshop will permit the wreck of a machine for want of a bolt, or rotting for want of a coat of paint, or a shed to cover it; or to allow the fertilizing liquors of the farm yard to be wasted in enriching the weeds of the roadside ditch.

It is indeed true that a general command over the use of one's fingers is a very important element of industrial efficiency. It can of course be developed by training, but the greater part of this may be of a general character and not special to the particular occupation. Manual skill that is so specialized as to be wholly incapable of being transferred from one occupation to another is in a new country like Canada of less importance than in an older community. Putting aside the faculties of artistic perception and creation, we may say that what makes one occupation higher than another, what makes the works of one country more efficient than another, is chiefly a superiority in general sagacity and energy which is not specialized in any one trade. To be able to bear in mind many things at a time, to have everything ready when wanted, to act promptly, and show resource when things go wrong, to accommodate one's self quickly to changes in details of the work done, to have always a reserve of force which will come out in emergency, these are the qualities which make a great industrial people. They are not peculiar to any occupation, but are wanted in all, and to a great extent can only be acquired by training. To give our students this needed adaptability, a whole building devoted to the Manual Arts is a necessary adjunct. It should contain rooms for wood and metal work, a machinery hall, a lecture room, a drawing room, and offices. Concurrently with the systematic course of the workshop, the machinery hall would offer *unlimited manual temptations* to the boys to take the machinery to pieces and place together again, to study methods of gearing, driving, sketching and drawing the various parts—in short to be free to attempt anything they choose without following a routine course.

2. OPTIONAL COURSE IN WOOD-CARVING.

Originally this course was really outside my proper function, but as there was a demand for a class in this work I consented to undertake the instruction, and this arrangement still continues notwithstanding the increase in my other duties. This branch, too, needs much in the way of special tools, designs and storeroom—the work being much larger than those of the other courses.

3. THE CONSOLIDATED SCHOOL.

The Consolidated School occupies my time for two lessons a week. The course required is totally different from those hitherto specified, necessitating time for consideration, thought, and preparation—time which can be ill spared from my more immediate duties at the Institute.

4. NATURE STUDY CORRELATED COURSE.

The students attending are teachers sent by the various Provincial authorities to take a three month's course. The object of this course has been to demonstrate by means of practical work and lectures how the different subjects of the school may be correlated; how that Manual Training is not really

a subject to be taught so much as a means of teaching other subjects. Lessons were also given on construction of tools, cutting angles, method of sharpening and grinding tools, construction of the knife, plane, chisel and saw. Drawing—hard and flexible point; correct methods of handling brush and pencil; brush drawing; coloring; drawing and coloring of leaves, sprays, buds, roots, birds, insects, flowers, and sections of timber. Practical work was given in wood, clay, and cardboard.

5. NORMAL COURSE.

This course aims at giving a thorough training to teachers holding permanent professional certificates desiring to qualify as Manual Training Instructors.

Subjects of study.

Paper-folding. Cutting, tearing, mounting, designing, and coloring.

Clay-modelling. Manipulation of clay, clay cutting and carving, storage and tempering; modelling of type forms, natural objects, casting.

Rattan and Raffia work. Basketry, weaving.

Cardboard work. In thin and thick board.

Practical woodworking. Construction and constructive design.

Drawing. Freehand sketches, working drawings, plane and solid geometry, elements of design.

Tools. Construction of, their use, care and sharpening, analysis of the action of cutting tools.

Theory and History of Educational handwork.

Organization. Equipment, methods, materials, cost, etc.

Thesis on a given subject.

Machine Shop Practice. Tools, templets, lining out, chipping, filing, drilling, drifting, methods of union, etc.

Lathe Work. Turning in soft and hard woods, tools and tool angles, chucks and chucking, boring, slide rest turning, screw cutting, etc.

Forge Work. Tools, cutting, breaking, hammering, care of fire, pointing, bending, sharpening, drawing, punching, twisting, flattening, welding, upsetting, hardening, and tempering.

Sheet Metal Working. Jointing, rivetting, soldering, soldering-iron, Bunsen burner, blowpipe, brazing, etc.

The Metal working and Machine shop Practice part of the course have not been carried out owing to want of provision and accommodation.

Of the twenty student-teachers who took the special Summer Course fourteen sat for examination, and an interim Certificate issued to the successful candidates for the following subjects:

Practical Woodworking.

Plane and Solid Geometry.

Drafting—Working Drawings.

Construction and constructive design.

Tools—Construction, care, use and sharpening of.

Timber—Structure, growth, diseases, seasoning, etc., of.

Theory and Practice of Manual Training.

Thesis on a given subject.

Successful Candidates.

Brennan, J., Toronto.

Chapman, F., London.

Clarke, R. W., Ballyduff.

Kirk, W. F., Toronto.

Painter, A. J., Jordan.

Shorthill, R. N., Guelph.

Coleridge, F. K., Guelph.

Faw, E., Toronto.

Jackson V. W., Fullarton.

Stuart, C. H., Ancaster.

Tuck, J. R., Mosboro.

Wilcox A. E., Stoney Creek.

Winchester, H., Ottawa.

Through the kindness of the Board of Education of the City of Guelph, our students were given opportunity for practice, criticism lessons, and observation work in the Manual Training room at the Central School, so ably conducted by Miss Rose. I herewith tender them my sincerest thanks for the facilities offered and Miss Rose for her kind and generous help.

The work of this course has been very much hampered owing to lack of racks for tools in the woodworking room, diagrams, specimen courses of models, illustrative charts, cases for finished work, storage accommodation for clay, cardboard, and primary work material.

This department should be such as will afford the highest facilities for securing professional training in all branches of the work if we are to meet the demands of the Educational Department.

I cannot close this report without expressing my sincere gratitude for the invaluable assistance and cordial sympathy I always received from the late Dr. Muldrew.

In conclusion, I beg to thank Dr. Mills, the ex-president, and yourself for the generous help afforded me, and to bespeak earnest consideration for the recommendations I have made.

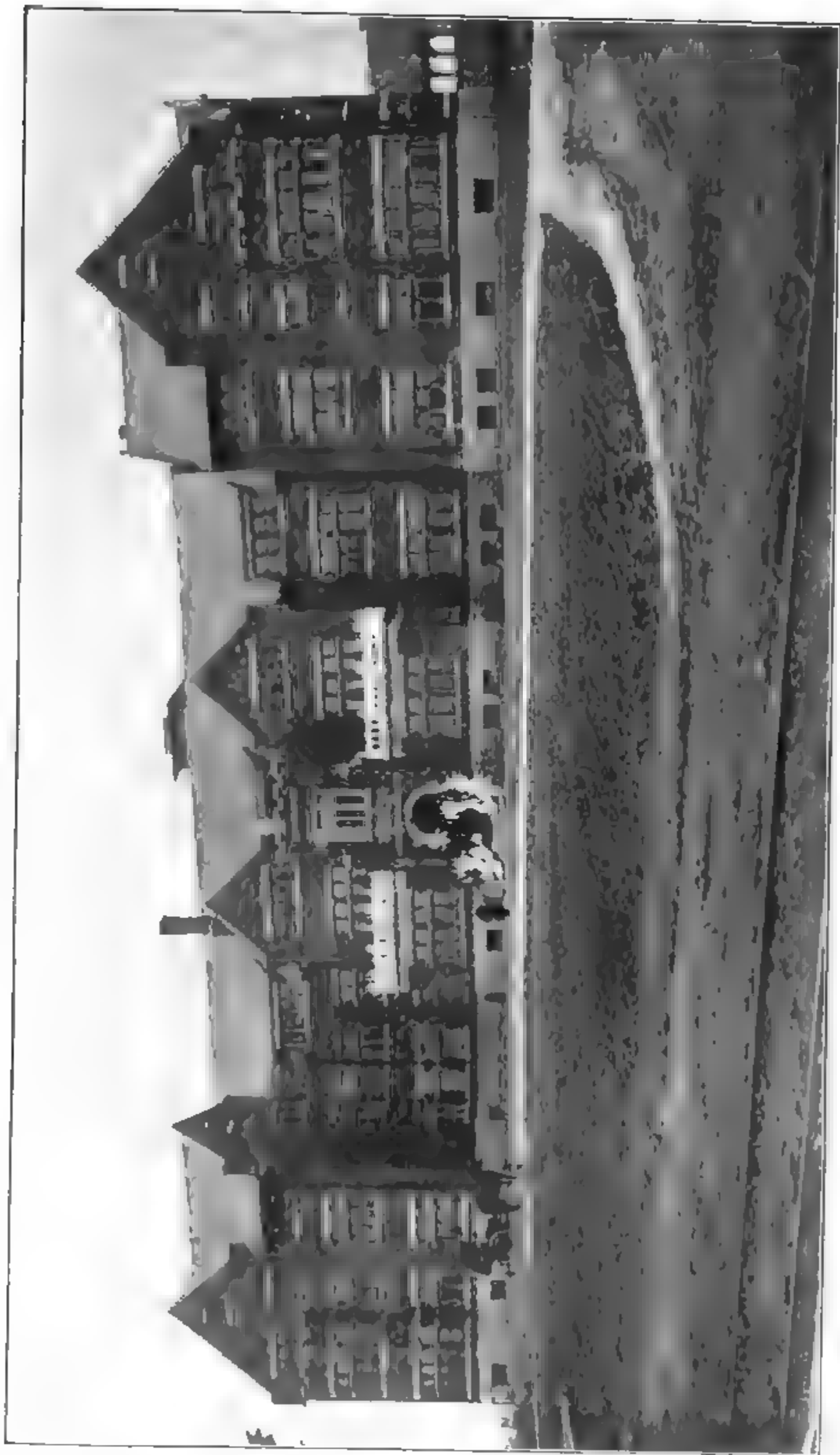
I have the honor to be, Sir,

Your obedient servant,

JOHN EVANS.



A Nature Study Class on a Geological excursion.



Macdonald Hall, Guelph, Ont.

PART III.

THE ACTING DIRECTOR OF NATURE-STUDY.

To the President of the Ontario Agricultural College:

SIR,—At your request I submit this first Report of the Nature Study department of the Macdonald Institute. The report will deal with the progress of the department from its inception to the end of 1904; with the classes which received instruction; with the courses of instruction, and with the plans which the late Dr. Muldrew, Dean of the Institute, had in mind for carrying out the wishes of the generous founder, Sir William Macdonald.

THE DEATH OF DR. MULDREW.

On the afternoon of October 7th the community was shocked by the news of the sudden death of Dr. W. H. Muldrew, Dean of the Macdonald Institute. He was but thirty-seven years of age, and had just entered upon his second year of service at the Institute. He had won a high place in the estimation of his fellow-teachers of the Province by many years of successful teaching in both public and high schools. He had been given the highest honor in Pedagogics (the degree of Doctor of Pedagogy) the University of Toronto could bestow. He was rearing for himself an abiding monument in the Macdonald Institute, whose work and organization is in a large measure the expression of his strong personality.

Dr. Muldrew was a man of broad and generous sympathies. He possessed a strong, self-reliance which kept him ever buoyant and hopeful. His large, generous, open heart soon won him the confidence of his associates and his pupils, upon whom he exerted a potent and beneficial influence. His views on educational matters were always up-to-date, clear-cut, and essentially practical, as his plans for the new Nature Study movement show. His death must be considered a great loss to the cause of education in the Province.

The late Dr. Muldrew was born on the 25th July, 1867, in Hope Township, County of Durham, and spent his early years on the farm—the very best training ground for youth. Fond of outdoor life, he grew up sturdy, strong, and athletic. On the farm he formed that acquaintance with Nature which gave the bias to his life's work. He attended the High School at Port Hope, and there secured his teacher's certificate. He taught in a rural public school for a few years near Rice Lake, then studied at Woodstock Collegiate Institute for a short time, where he secured his first-class certificate. He then attended the Training Institute for High School Teachers in Owen Sound. His first High School experience was gained at Madoc High School, where he taught as Science Master for three years. During this time he prosecuted his college studies so well that, after an attendance of less than half a year at Queen's, he was able to take his degree of B.A., with honors in mathematics. His next position, in 1894, was as Science Master in Orillia High School. In July of this same year he married Miss Jennie Rollins, of Madoc, and in October was appointed principal of Gravenhurst High School. There he remained for nine years, until invited by Dr. Mills to become Dean of the Macdonald Institute here. In May, 1899, while in Gravenhurst, he obtained the high degree of Doctor of Pedagogy from the University of Toronto.



Macdonald Institute, Guelph, Ont.

As a teacher, Dr. Muldrew was almost without an equal—calm, clear, kind, and inspiring; as an administrator and leader he was tactful and thoughtful of others; as a student he was hard-working, systematic, and logical in his work, and keenly observant; as a friend he was true as steel, unassuming, and thoroughly unselfish.

In his home Dr. Muldrew was ideally simple in his manners. It was there that he was to be seen at his best. His children were his most intimate friends and companions in the leisure hours when he was free from the duties of his profession.

I.—THE COURSES IN NATURE STUDY.

One of the conditions attached to Sir William Macdonald's generous gift of the Macdonald Institute and the Macdonald Hall to the Province of Ontario at the Ontario Agricultural College, as seen in Prof. J. W. Robertson's letter and memorandum of Jan. 6th, 1902, to the Premier of Ontario, was that "Courses of study and training in Nature Study should be provided for teachers in rural schools, who desire to qualify themselves in these newer subjects and methods of education."

Sir William Macdonald in the Memorandum outlined his view of the importance of Nature-Study and School Gardens in rural schools as follows:

"(1) It would certainly be of great benefit to the children at any rural school if a school garden containing plots for every child above the age of eight or nine years could be provided. Those plots would be used (like slates of large size) to put 'things' on, to be rubbed off when they had served their educational purpose. The gardens could be used, as they are at a few schools in England, and as they are at many schools on the continent of Europe, for the training of children to habits of close observation, of thoughtfulness, and of carefulness.

"(2) If one may mention a method which would seem to include the best, it would be that of tracing results back to their causes, until that habit of mind is formed in the children. When a child does anything with its own hands, such as planting a seed, pulling up a plant, making examination of the changes which have taken place during its growth, making a drawing of it, mounting it and putting its name on it, he receives impressions by the sense of touch, he sees, he hears the noise of the movements he makes, and he smells the soil and the part of the plant with which he is dealing. Those impressions are definite and lasting, they add to the sum of sensuous knowledge, they prepare for the preception of logical knowledge, in a common-sense way.

"(3) For instance, if a child should plant ten grains of wheat in a row, ten grains of Indian corn in another row, ten sets of potatoes in another row, and ten clover seeds in another row; if he should pull one each of these plants every week, and find out for himself, under the guidance of a competent teacher, what had taken place in the meantime; if, further, he should make drawings of the plants and a written statement of the progress of growth, as he was able to observe it, from week to week, such a course, occupying half a day per week, would certainly give a boy or girl a great amount of exceedingly useful information, and also habits of investigation, observation, comparison, and thoughtfulness, which are immensely desirable. These would quicken the intelligence of the children, and lead them to have both desire and capacity for living happily amid rural surroundings."

In the Notes appended to the condition given above the reasons for and advantages of such courses were stated as follows:

"(1) To make possible such additions and changes in rural schools as have been indicated, and to let them be capable of anything like general adoption and extension, there is need for further preparation of the teachers. No doubt teachers in Canada would be willing to qualify themselves for this better sort of work, if an opportunity were provided. It seems desirable and practicable to give such teachers the opportunity which they need.

"(2) At several places in England, in 1901, short courses of instruction and training in methods were provided for periods of only three weeks, with the expectation of doing a good deal towards qualifying teachers to carry on their work in a better way. In Canada, it might be possible to arrange for courses of training for thirty teachers at one place, each course to last for two or three months. During this course the teachers would carry on Nature Study work as they expected the children to do it at the school afterwards. A plant-growing house for Nature-Study work would not be so costly for construction and maintenance that it would be a very difficult accommodation to have, for the winter and spring months when outdoor work would not be practicable.

"(3) If provision should be made for a class of about thirty teachers at each short course, it is hoped that the government of each Province concerned would arrange (by providing a substitute or otherwise) to enable approved teachers in rural schools to take the short course without loss of situation or loss of salary.

"(4) For a period of three years, at least fifteen teachers of rural schools outside the Province of Ontario are to be eligible to receive instruction and training in each short course without any fees.

"(5) For the first year, it is proposed to make, (a) an allowance at the rate of five cents per mile for the actual distance from the teacher's school to the Ontario Agricultural College, to help in meeting travelling expenses, and (b) an allowance of \$25 to help in meeting the expenses of board and lodging, to every approved teacher who has taken a full course satisfactorily."

In accordance with the agreement, early in 1903 courses of study were outlined and printed in the Provisional Announcement of the Macdonald Institute. These were:

1. Two Years' Normal Course. Teachers' or Specialists' Certificate—September to June.
2. Three months' Course. For Actual Teachers.—Certificate.

TEACHERS' NORMAL COURSE OF ONE YEAR.

An advanced course extending over a full College year is given to teachers who wish to qualify as specialists in this department. Only teachers holding permanent Professional Certificates are eligible for entrance. The aim is to provide instructors fitted to carry on the work of Nature-Study and School Gardens in a group of Rural Schools, in a large Consolidated School, or in an Agricultural High School.

COURSES OF STUDY AND PRACTICE.

The work will be selected from the following outlines as modified by natural conditions and the needs of the various classes.

School gardens will receive much attention, and other topics will be dealt with very largely in relation to these.

OUTLINES OF NATURE STUDIES.

Teachers' Courses of three months or one College year :

FALL TERM :—

1. *School Gardens*. Planning and keeping of school garden plots, keeping of garden records, studies of growths in different plants, control of weeds, insects, etc.

2. *Agriculture*. Field experiments as in Experimental department.

3. *Botany*. Laboratory work and lectures, excursions for the study of the ecology of plants, with special reference to trees, fruits, seeds, and weeds, collections.

4. *Zoology*. Excursions for the study of the ecology of animals, especially birds. Collections of insects.

5. *Geography*. Study of the surface of the land, an introduction to geography and geology.

6. *Geology*. Excursions for the study of soils, rocks, minerals, and land forms.

7. *Astronomy*. Elementary work. Movements of heavenly bodies, constellations.

8. *Special Problems*. Hibernation of insects ; formation of cocoons ; distribution of seeds ; migration of birds, etc.

9. *Conferences*. For discussion of methods and specific subjects, mainly by students in presence of teachers.

10. *Nature in Literature*. Reading and discussion of literature dealing with various phases of nature.

11. *Manual Training*. Elementary exercises in drawing, cardboard work, clay modelling, basketry, and woodwork ; use of knife and simple tools ; series of models for ungraded schools.

12. *Methods of Teaching*. Lectures with practice and criticism in the Institute and in the Macdonald Consolidated School.

WINTER TERM :—

1. *School Gardens*. Planning of plots, testing of seeds, bulbs, etc.

2. *Agriculture*. Study of live stock and poultry.

3. *Botany*. Lectures, with as much practical work as possible in greenhouses and plant-rooms of Institute.

4. *Zoology*. Domestic animals ; anatomy of certain types, simple physiology.

5. *Special Problems*. Study of winter buds, insect life, etc.

6. *Physics*. Laboratory practice and lectures in elementary physics ; study of the soils.

7. *Chemistry*. Laboratory work and lectures ; simple experiments for ungraded schools.

8. *Bacteriology*. Laboratory practice in elementary work.

Conferences, as in Fall Terms.

Nature in Literature, as in Fall Term.

Manual Training, as in Fall Term.

Methods of Teaching, as in Fall Term.

SPRING TERM:—

1. *School Gardens*. As in Fall and Winter Term, with special attention to vegetables and fruits of early summer.
 2. *Agriculture*. Experimental plots and farm crops.
 3. *Botany*. Ecology of buds, spurs, etc., study of trees, identification of flowering plants, grasses, weeds, ferns, etc., collections.
 4. *Zoology*. Ecology of insects, excursions for study of birds, animals, pond life, collections.
 5. *Geology* (Elementary). Operation of dynamic agencies.
 6. *Special Problems*. Development of frog, stages of currant sawfly, etc., relation of insects to plants, value of birds, toads, etc., to the garden and the farm.
- Conferences, as in Fall Term.
 - Nature in Literature, as in Fall Term.
 - Manual Training, as in Fall Term.
 - Methods of Teaching, as in Fall Term.

In August, 1903, Dr. W. H. Muldrew, Principal of the Gravenhurst High School, was appointed Dean of the Institute and Director of the Nature-Study Department, but on account of the incomplete state of the new buildings no work of a practical nature could be attempted until the Spring term of 1904. In the interval Dr. Muldrew's attention was devoted to the general organization of the different departments; to the delivery of courses of lectures to the Domestic Science Normal Class in Psychology and History of Education; a special course of lectures in Methods of Teaching, Psychology, and History of Education to an advanced Normal Class in Nature Study; and to the preparation of two bulletins, the first "A Letter to the Schools: The Macdonald Institute in its Relation to Nature Study in our Public Schools"; the second, a bulletin entitled "Hints on Making Nature Collections in Public and High Schools."

In the spring term of 1904, an afternoon Nature Study excursion was taken weekly by those students in Domestic Science who wished to become familiar with the common plants and birds.

The Summer Class. As a large number of teachers were anxious to attend a short summer class in Nature Study, Dr. Muldrew deemed it advisable to offer a month's course, in July. Thirty-seven teachers availed themselves of the course offered by Dr. Muldrew, Mr. Jarvis, and myself. Daily excursions were made for the study of the common birds, trees, shrubs, wild flowers and plants, ferns, weeds, insects, rocks, etc., during which the student learned to prepare collections of value in teaching Nature Study. Following were the members of this Class:

Church, Rebecca, Toronto.
 Coleridge, Frank, Guelph.
 Collier, Jas. D., Charlottetown, P.E.I.
 Currie, Jessie C., Toronto.
 Doake, Jennie, Hamilton.
 Fotheringham, Susie, Toronto.
 Fyle, Carrie, Brantford.
 Gillrie, Beryl, Drayton.
 Givin, Helen, Guelph.
 Gilfillan, James, Bowmanville.
 Hallett, Lizzie, Guelph.
 Hanlon, J. Raymond, Guelph.
 Hastings, W. S., Walmer.

Hepburn, Jean, Leitrim.
 Hutchison, Martha W., Toronto.
 Irvine, Mabel, Brampton.
 Jolley, Etta, Toronto.
 Kaempf, Jessie, Berlin.
 LeLéan, Edith, Toronto.
 McCann, Helen, Billings Bridge.
 McDonald, John A., Hickson.
 McDonald, David Arch., Braemer.
 Marshall, Esther, Brampton, Ont.
 McPherson, Florence, Caledonia.
 McCutcheon, Georgina H., Guelph.
 Macpherson, Mary C., Hamilton.

Moore, T. J., Guelph.
 Nablo, Grant Hayes, Mull, Ont.
 Nelson, William, Guelph.
 Penfold, Maude, Guelph.
 Patterson, Ida E., Guelph.
 Snider, Wilbert, Guelph.

Strachan, May, Guelph.
 Stiven, Fanny, Guelph.
 Workman, Annie J., Orangeville.
 Weatherston, Elspeth, Guelph.
 Weatherston, Jeanne B., Hamilton.
 Winchester, Harry, Ottawa, Ont.

The First Macdonald Nature Study Class.—This class came to us in September, according to the terms of the agreement with Sir Wm. Macdonald; five members from Prince Edward Island, six from Nova Scotia, seven from New Brunswick, five from Quebec, and ten from Ontario. In addition to these, two other teachers came in as special students, and remained with us throughout the term. Of this large class of teachers seven were gentlemen and twenty-eight ladies. The following are the names of the members of this class.

LIST OF NATURE STUDY STUDENTS, SEPTEMBER-DECEMBER, 1904.

Ackland, Lemuel, Hampshire, P.E.I.	Lyon, Jennie E., Guelph, Ont.
Babbitt, Bess, Shanklin, N. B.	Long, Tina, Charlottetown, P.E.I.
Blacklock, R. F., Smith's Falls, Ont.	Moses, Winnifred, Belmont, N.S.
Brennan, A. M., Old Barns, N. S.	Mulherrin, Helena, Woodstock, N.B.
Clarke, Annie, Bay View, P. E. I.	Noonan, Lizzie, Albany, P.E.I.
Crawford W. M., Debec, N. B.	Oxner, Bertha G., Brookfield, N.S.
Crysler, Sarah, Cobourg, Ont.	Palmer, E. Birchard, Cobourg, Ont.
Doyle, Daniel, Wayside, Ont.	Patch, Edna M., Brome, Que.
Fenton, Chas. H., Grafton, Ont.	Prichard, Frances P., Hampton Sta.,
Finlay, R. M., Lindsay, Ont.	Robinson, W. J., Dutton, Ont.
Hall, Carrie M., Middleton, N. S.	Shanklin, Annie J., Shanklin, N.B.
Hayes, Maud., Bideford, P.E.I.	Short, Louise, Salem, Ont.
Holland, L. E., Georgetown, Que.	Spencer, Agnes, Great Village N.S.
Huff, Harriett E., Rossmore, Ont.	Spurr, Margaret C., Middletown, N.S.
Ingalls, Roxana A., West Brome, Ont.	Taylor, Helen E., Knowlton, Que.
Kathan, Romelia A., Iron Hill, Que.	Toole, Wilhelmina, Tooleton, N.B.
LePage, E. Mabel, Woodstock, N.B.	Yeo, Chas. T., Little Britain, Ont.
Roddick, J., Guelph, Ont.	

The Teachers' Normal Class of One Year.—As already mentioned, a Normal Class of three active teachers was formed by Dr. Muldrew in September, 1903. At the completion of the course in June, 1904, two members of the class, T. D. Jarvis, B.S.A., and H. S. Peart, B.S.A., passed their examinations satisfactorily and are thus entitled to the certificate.

At the beginning of the Fall Term, when the first Macdonald Class of teachers from the different Provinces came to us, the arrangement of the work was as follows:

Dr. Muldrew—Methods of Nature Study; Child Study and Psychology; Nature in Literature; Field Study in trees, birds and common animals.

Prof. Lochhead—Field Work and Lectures in Geology and Physical Geography; Elementary Astronomy; Experimental Plant Physiology and School Gardens.

T. D. Jarvis—Field Work with plants, insects, and diseases of plants; Laboratory courses in structural Botany and Entomology.

J. Evans—Manual Training and Color Work.

The death of Dr. Muldrew on October 7th, compelled a re-arrangement of the courses. Most of Dr. Muldrew's work was taken over by myself;

Prof. Hutt of the Horticultural department took charge of the School Gardens; Prof. Reynolds of the Physics department gave instructions in Meteorology and Soils; Prof. Harcourt of the Chemical department dealt with the chemistry of the soil and the plant; and Mr. A. B. Klugh took charge of the study of birds.

On the pedagogical side much attention was paid to the subject of correlation of the other subjects of the school course with Nature Study, to its true aims and values, and to the way it should be taught to give it its true value as an educative factor. The view was firmly taken that the acquisition of knowledge is of less importance to the pupil than correct habits of observation and enquiry.

The various powers of the child-mind, although present at birth, do not all develop at the same rate. Some develop rapidly, and reach their maximum early, while others grow more slowly, and are dependant for their development upon the materials furnished by the activities of the more rapidly growing powers. This knowledge of the order of growth of mental powers should be the property of every teacher, for a great educational principle is based on it, viz., *those powers that are at the time most active should be nourished and developed.* The advocates of Nature Study contend that no other method of education is so well adapted to the growing mind of the child, for it is supremely natural. The child by this method is furnished the nutrition which he can assimilate properly, and which will administer to his development. He abhors being spoon-fed and crammed. Nature Study stands for the active pupil and the suggesting teacher. In the words of Froebel: "To have found out one-fourth of the answer by his own effort is of more value and importance to the child than it is to half hear and half understand in the words of another." This is the spirit of Nature Study.

II.—EQUIPMENT FOR NATURE STUDY.

The Nature Study department is well equipped with rooms for indoor study and practice. These occupy the ground floor of the west wing of the Institute, and include a reading-room, provided with some of the best periodicals relating to Nature Study; a library containing the most useful Nature Study books; a study material room or museum where objects useful in the teaching of Nature Study are kept; a practice room where a teacher may try her 'prentice hand on a small class of children; a large Nature Study laboratory and class-room; a storeroom for physical and chemical supplies; two tool rooms; a greenhouse; and a plant house (the two latter in process of erection). This year very few supplies or pieces of apparatus were purchased for Nature Study purposes, consequently there is a lack of material for indoor experiments which should be supplied as soon as possible. Geographical models and maps are sorely needed. Under the present arrangement, where the Biological department gives most of the instruction in Entomology, Botany, and Geology, the equipment of that department is at the service of the Nature Study department. The same might be said of the Physical and Chemical Departments in so far as they give instruction to the Nature students.

III.—THE RELATION OF THE MANUAL TRAINING DEPARTMENT TO NATURE STUDY.

From the outset all the teachers-in-training spent one day a week in the Manual Training department with Mr. Evans. There they made the insect-cages, insect-boxes, terraria, card-board boxes for holding seeds, etc., which

form an essential part of the equipment of a nature student. They also had instruction in blob or brush-work, proceeding from the most elementary strokes to black-and-white sketches. The practice in color-work led up gradually from the three simple primary colors to the blending and combinations of these in the many-colored sketch.

Instruction was also given in clay-modelling, which represents a very important form of expression of the natural objects studied by the pupils.

Good teachers of Nature Study realize the importance of developing the powers of the child-mind along three lines, *observation, interpretation, and expression*. No one of these three should be neglected, for all are about equally valuable. Several forms of expression can be employed, but usually only two are to any extent used in our schools at the present time, largely on account of the absence of suitable materials. Nature probably provides the best materials for practice in such forms of expression as *oral and written language, coloring, modelling, drawing and making*, etc. Some of these forms can be employed at an early stage of the child's school life, but the chief use of the newer forms of expression is to develop the *individuality* of the child, and to cultivate the habits of *clearness and truthfulness* at an early stage. And how can a child be more thoroughly impressed with the importance of truthful telling and careful seeing than in doing these things where his own work stands up before him as a witness to tell him whether he is right or wrong.

The New Educational movement takes cognizance of all these modes of expression, but it is essential that the teachers should know how to guide the pupil in giving expression to his ideas. Hence, the value of these phases of Manual training at the Macdonald Institute. In my judgment, the work done by the teachers in the Manual Training department will be of inestimable value in giving effectiveness to Nature Study instruction when correlated with the expressive studies of the school course.

IV.—THE RELATION OF THE MACDONALD INSTITUTE TO THE RURAL SCHOOLS.

As already stated, the object of the establishment of the Nature Study department of the Macdonald Institute was to "provide courses of study and training in Nature Study for teachers in rural schools." It was the earnest hope of the generous donor of the Institute that rural life would be enriched and made more useful and intelligent and happy by the introduction of the study of the plants, the birds, the soils, and the insects, with which the young lives come into daily contact, into the regular exercises of the schools. Upon Mr. Muldrew, as the first head of the Nature Study department, devolved the responsibility of outlining the scope of the department to carry out the wishes of the donor.

He recognized quite clearly that the function of the Institute was not performed when it gave only courses of study and training to those teachers sent from the Provinces a class of thirty-five every three months, according to the terms of the agreement with Sir Wm. Macdonald. He wanted, moreover, to get into close touch with those rural teachers who could afford neither the time nor the money to attend the Institute, so that he might help them in their difficulties. He held that "a very important duty of the Macdonald Institute will be to assist teachers in extending their knowledge of nature and their interest in the Nature Studies of their schools." In his *Letter to the Schools* Dr. Muldrew said: "Our first need is information on the subject from the teachers' standpoint. We have heard much about Nature Study from

authors and educators, but very little from the schools themselves. We know that good work is being done by many teachers, and we are anxious to know their methods and results. Earnest teachers may have met with failure in whole or in part, and we wish to know the cause. Will you help by sending us concise notes on your experiences in connection with practical Nature Studies? Write freely and in confidence; our only object is to get at the truth as to the present position of this department of work. By way of guidance we append a few suggestive questions, but these are not intended to be answered in order to exclude other aspects of the subject. Write on what interests you most.

"What has been done towards introducing real Nature Study into the schools? What is the attitude of the teachers—of the inspectors—of the trustees—of the people? What kind of work has been most satisfactory? How has it affected other studies? Have you made any collections? Have your local fairs offered prizes? Have you reference books in your school library? Have you a school garden? Have you planted trees in your grounds? Are the parents interested? What are the most serious hindrances? What is the effect on other school studies or on discipline? What objections are met with? What form of help would be most useful to you in introducing this subject?

"We invite correspondence on all such questions. The teachers and inspectors can probably help us most, but we wish to hear from all who are interested. We shall be glad to learn of success, but records of failure may be even more valuable to us. Guided by such information, we hope to be able to help you in making Nature Study an important feature of our educational system.

"We mean to publish from time to time a series of bulletins devoted to the interests of teachers of Nature subjects. These will report the results so far attained, and will suggest topics and methods of treatment, or assist in solving difficulties that may arise. We hope to receive assistance in this work from leading teachers, and to make these bulletins both interesting and useful to the schools.

"But, aside from this, we trust that you will feel free to consult us on any matter relating to this department of work. No teacher can be expected to be familiar with all branches of Nature, or with all the details of any branch. When difficulties arise in matters of knowledge, as well as of method, we shall be glad to help you. The strange weed or flower, or tree; the new insect or bird; the peculiar rock or mineral; the latest disease to attack the crops—all such topics we shall be prepared to investigate on the one condition that they are of interest to an humble learner somewhere. In this we shall have the active assistance of the various departments of the Agricultural College and of prominent teachers in other institutions.

"The Macdonald Institute has been presented to the people and the schools; it remains for us to make the fullest use of the advantages that it is able to offer."

Further Dr. Muldrew purposed establishing extra-mural courses in Nature Study for the benefit of teachers who could not attend the Institute. Outline studies would be sent to registered teachers, and on the satisfactory completion of a certain number of these studies as evidenced by the reports, collections, drawings, paintings, etc., which indicate investigation, credit would be given and a certificate issued. By such ultra-mural courses he hoped to train a much larger number of live, active teachers than he could possibly have in actual attendance at the Institute.

Furthermore, Dr. Muldrew was strongly impressed with the importance of the newer movements afoot for doing more effective work in rural dis-

tricts, such as Consolidated Schools with their collecting vans, better buildings, and school gardens; Travelling Instructors for Rural Schools; and Agricultural High Schools with their school gardens, experimental plots, and arboretums. He saw clearly, however, that there was a pressing need for teachers properly qualified for the new work, and he was making plans for supplying this need at the Macdonald Institute, which is in close affiliation with the different departments of the College proper.

The Education Department at the present time recognizes the non-professional training given at the College in the following way:

"Certificates in Agriculture and Horticulture, entitling the holders to teach Agriculture or Horticulture and Nature Study in the Public Schools of Ontario, subject to the regulations of the Educational Department as to Model or Normal School Training, will be given to Associates who—

"(a) Get at least 40 per cent. of the marks in each of the following subjects of the final examinations for the Associate Diploma, and 50 per cent. of the aggregate thereof: English literature and composition, agricultural physics, agricultural chemistry, economic botany, economic entomology, horticulture, agriculture, and dairying.

"(b) Spend an additional year at advanced study and work in Agriculture or Horticulture, as prescribed below, including a six weeks' course in Nature Study (April 17th—May 31st), with practical tests and examinations immediately afterwards.

"(c) Devote the month of June or July to observation and study of methods and practical operations at the College—plans of cropping; preparation of soil, seeds, and seeding for all crops on the College farm and in the College garden, orchard and plantations; management of live stock; cultivation and harvesting of all crops at the College,—everything on the College Farm and in the Horticultural department.

"(d) Are approved and recommended by the Heads of the Departments responsible for the subjects and examinations mentioned in (a), (b), and (c), taking into account the knowledge of farm work and farm conditions and the ability to teach Agriculture and Nature Study in the Public Schools.

"Graduates who meet the requirements in (c) and (d) for Certificates in Agriculture and Horticulture will be eligible for appointment to teach Agriculture and Nature Study in the Public Schools and High Schools of Ontario, as soon as they comply with the requirements of the Education Department as to training in the Normal College."—(College Circular.)

Arrangements, it was hoped, might be made with the Education Department whereby the professional training would also be given at the Macdonald Institute in Pedagogy, Psychology, and Methods of Teaching. By these means the Macdonald Institute would accomplish the end for which it was erected.

V.—WHAT IS NATURE-STUDY?

Many people do not understand the exact significance of the term *Nature Study*, consequently there is much confusion in the public mind as to the importance of the new educational movement with Nature Study as the focus of the disturbance. In reality Nature Study is a pedagogical term (used for want of a better one), and this will account largely for the popular misunderstanding of its meaning.

Nature Study is a *method of study*, and not, primarily, a subject of study. It is a means of developing mental power in the pupil under the

careful guidance of the teacher, by encouraging close observation of the things of Nature, which lie about him, and by begetting an attitude of inquiry into their meaning so that the truth is discovered through the exercise of the pupil's own self-activities.

It is quite true that there are other values in Nature Study, but they are secondary, viewed from a pedagogical standpoint. With many persons the acquisition of information about the things of Nature by a study of Nature is the chief aim; while with others the development of a sympathy with, and an interest in, the common things that surround them is the only value in its study. These secondary values are very great, but they can be realized as a matter of course by making method the chief aim of Nature Study. Now we have Sympathy, Information, and Method, but the greatest of these is Method.

In my judgment, the main reason why Nature Study has not met with that measure of success which its advocates had hoped for in many places, has been the placing of the emphasis on the wrong value and on the wrong aim.

It will be inferred, therefore, that the teaching of Nature Study is not easy. Success will depend almost entirely on the teacher, since it is a method of study. It is comparatively an easy task to fill the minds of pupils with information about Nature, but this is not Nature Study. The true teacher must be a patient, sympathetic guide, acquainted with the mental peculiarities of each pupil and with the subject to be investigated, so as to be able to direct the activities and sustain the interest of the pupil to the discovery of truth for himself. For lack of these qualities many teachers will fail in Nature Study work in school.

Perhaps some persons are asking: "What is the difference between Elementary Science and Nature Study?" Elementary Science is rather a subject of study, and always carries with it the idea of classified knowledge, obtained by a systematic and logical study of the subject. Of necessity the natural interests and activities of the pupil must not stand in the way of the logical development of the subject, and that viewed from the standpoint of the adult, who is trying to inculcate general laws and principles. Nature Study, on the other hand, is a Method of Study where the teacher uses the natural objects and adapts them to the questioning experiences of the young child. In the words of Prof. C. B. Scott, Nature Study is "Nature studied in its relations to the child, from the child's standpoint, by the teacher with the children."

Prof. L. H. Bailey has well said: "When the teacher thinks chiefly of his subject, he teaches a science; when he thinks chiefly of his pupil he is teaching Nature Study."

It may be interesting just here to compare the views of several prominent educationists with regard to Nature Study.

Prof. P. Geddes: "The habit of observing and thinking for one's self and at one's best, without books or help, in the presence of the facts and in the open air."

Prof. Lloyd Morgan: "A means by which simple natural objects acquire meaning."

Prof. M. E. Sadler: "Nature Study is not a subject, but an influence which permeates the whole range of school studies and affects the intelligence and point of view of teachers and pupils."

J. Dearness: "Nature Study from the public school teacher's point of view is the maintaining in educative directions the child's natural interests in its environment."

Prof. G. F. Hodge: "Nature Study is learning those things in nature that are best worth knowing, to the end of doing those things that make life most worth the living."

Prof. C. B. Scott: "Nature Study is nature studied in its relations by the child, from the child's standpoint, by the teacher with the children."

Prof. L. H. Bailey: "Fundamentally, Nature Study is seeing what one looks at and drawing proper conclusions from what one sees; and thereby the learner comes into personal relation and sympathy with the object."

VI. THE ADVANTAGES OF NATURE-STUDY.

Apart from the real aim of Nature Study in education, which has already been discussed, it is clear that many advantages will flow directly from its introduction into our schools. Sir George Kekewich of England says: "There is surely no kind of teaching which confers upon our children so many and varied advantages."

In an article by W. M. Webb, entitled "Nature-Knowledge: Its Progress and Interpretation," published in the *Record of Technical and Secondary Education* of October, 1902, the advantages of Nature Study are well summarized as follows:

"1. To interest the pupils and give opportunities to those whose genius is not in line with ordinary school subjects.

"2. To afford a general preparation for life and success in the world.

"3. To encourage spontaneity and the power of acting for one's self under new conditions.

"4. To make men better citizens, and better able to cope with their living environment.

"5. To cultivate a love of the beautiful and to add to the enjoyment of life.

"6. To develop culture, refinement, and humility.

"7. To form an ideal stepping stone to science.

"8. To improve health.

"9. To stay the rural exodus."

VII.—THE AGRICULTURAL PHASE OF NATURE STUDY.

It must be admitted that the study of Agriculture in our rural Public Schools has not been on the whole successful. This partial failure at least is to be attributed to several causes: the inability of the majority of teachers to teach the subject through lack of knowledge of, and want of interest in, rural conditions; the absence of proper equipment for the teaching of a difficult and complex science, thus making it wholly a bookish study; and the placing of a premium on information pure and simple, or cram, which must inevitably lead to mental nausea in both teacher and pupils. In the few cases where teachers were successful in their efforts they taught not Agriculture but Nature Study. To give Nature Study an agricultural trend is quite possible and practicable; in fact, to give it any other trend in rural sections would be wrong.

It must be admitted, also, that in rural schools the courses of study in the past have had too little reference to the lives of the pupils, and as a rule, very little interest had been awakened at school in the common things of the country. The plants of the roadside and field, the birds, the insects, and the soil were less interesting than the pyramids of Egypt or the dwarfs of Central Africa. The central idea in rural education should be a preparation for complete living on the farm. This can only be effected

when the rural people are brought into sympathy with their life work by a study of their surroundings.

It is believed that Nature Study is the best, the only natural means for adding new interest to the life of the country pupil. It is Nature's own method of training her children. The child instinctively interested in the simple natural objects about him, under careful guidance, will be led to investigate them, and to find out their meaning. The child has an inbred spirit of investigation, and if this is properly directed, it will yield him results of great educative value. The farm and its surroundings would become more interesting, and have a deeper meaning to the child. Country life would become more satisfying, because the things of the country would become part of his life. Moreover, the information which he gains in his studies of Nature would become of service to him when he leaves school to begin the more serious operation of farming. His studies of the unfolding of the plant from the seed, bulb, and tuber, have made him familiar with the conditions which govern growth; his garden plot has already made him an intelligent gardener; he knows the habits of the weeds which come up, as it were, to compel him to stir the soil; he has become acquainted with the wireworm, the cutworm, and the borer; he knows the common diseases of plants, and the birds which help him in fighting insects; in short, his Nature studies would help him at every turn.

SCHOOL GARDENS. In our efforts to arouse an interest in Nature Study, we are urging the introduction of school gardens. The educative value of such gardens has been tested for many years in Europe and in some of the States of the Union. They appear to be the best means of arousing in the parents an interest in Nature Study and the work of the school. They furnish a bond between home and school interests, and the parents can readily see that school life and studies, instead of being unrelated to rural life, are after all a preparation in the very best sense for life's work.

School gardens are also valuable because they emphasize the importance of "learning by doing." Besides, garden work can be readily correlated with the other subjects of the school programme. In many districts of Germany the whole school curriculum is based on garden-making and garden-keeping. Note, for example, some of the many topics for investigation that may arise in connection with garden work.

Make a *Calendar* of dates of planting the various vegetable seeds when there is a succession of vegetables through the season.

Make a diagram showing the succession of vegetables.

What vegetables may be planted in fall?

What planting of perennial flowering plants should be done in the fall?

Special Topics for discussion and investigation:

- (a) The site and aspect of the garden.
- (b) The soil and its improvement by spade-work, draining and manuring.
- (c) The build of a plant.
- (d) What a plant is made of.
- (e) How plants are nourished.
- (f) Sap and its movements.
- (g) Conditions of healthy growth.
- (h) Germination, growth, flowering, fruiting, and seeding.
- (i) Annuals, biennials, and perennials.
- (j) Evergreen and deciduous trees and shrubs.
- (k) The dependence of plants upon insects.
- (l) The effect of choosing for seed the larger or smaller samples.

(m) The effect of early and late springs on vegetation.

Some Arithmetic questions:

(a) The garden account.

(b) The number of plants to fill a given space.

(c) The comparative cost of two plots treated differently.

(d) The calculation of the percentage of sound seeds in a sample for a germination test.

(e) The calculation of the loss by insects, by fungi; and the gains by beneficial birds, frogs, and insects.

Some geometry problems:

(a) The laying out of plots in various forms.

(b) The construction of plants to scale.

(c) The slope of the garden.

Drawing in connection with School Gardens:

(a) The making of diagrams to illustrate important facts of plant and insect life.

(b) Drawings from Nature of beautiful flowers and leaves.

It is believed that the introduction of school gardens will stimulate not only the teachers and scholars, but also the parents, to take a greater interest in the appearance of the school grounds, which are too frequently neglected. The people of this Province have not yet realized the direct and indirect benefits that may come to the children and themselves by the possession of neatly-kept school premises. Dull, unsightly buildings and grounds will surely keep the tastes and habits of the community on a low level, but well-ordered schools with pleasing surroundings will unconsciously express themselves in better living and higher ideals on the part of both pupils and parents.

That Nature-Study will be a potent factor for this betterment there can be but little doubt, and here lies a great, wide field of work for the Macdonald Institute.

VIII.—THE TRAINING OF TEACHERS OF NATURE STUDY.

We have ever kept before us the two great needs of the teacher of Nature Study,—(1) an intimate knowledge of the laws of development of the child, how the mind operates, the needs and interests of the child, its activities and its sympathies, and (2) a knowledge of plants, animals, and rocks, and the forces operating upon them. The latter need seems to us to be even more essential at the present time than the former. As a writer has well said: "It is comparatively easy to humor a child's interest, but it requires the teacher's best skill to sustain that interest and guide it to an educative issue."

Inasmuch as we were dealing mainly with teachers of experience who had already some acquaintance with educational psychology, we devoted most of our time to the supplying of the second need. As will be seen from the syllabus of the courses given, we tried to give the teachers in the three months a fairly wide knowledge of the world around them. The training given, however, differed somewhat from the teaching of the ordinary academic laboratory, for there was this distinct object in our mind that at the end of the course the teachers were to depart enthusiastic lovers of Nature. Again, field excursions were made more prominent than usual, to the end that the teachers might know Nature in all her moods.

Some idea of the work to be done by the teacher with our assistance may be gathered from the following note for the student, prefacing the "Outlines

of Nature Studies" prepared by Mr. Jarvis and myself, as a guide for the observational work of the class:

FOR THE STUDENT.

1. Every student shall record daily one observation in the *Nature Study Journal*.

2. Every student shall keep a careful record of the observations made during excursions.

3. The *Note-Book*, with its observations and drawings, will be frequently examined, and the progress of the student will be largely determined from the *Note-Book*.

4. Every student is expected to make the following collections and to mount them in the most approved manner:

- (1) SEEDS.
 - (a) Weed Seeds... .. 25
 - (b) Cultivated Plants 15
 - (c) Trees and Shrubs... .. 10
- (2) PLANTS.
 - (a) Weeds... .. 15
 - (b) Trees..... .. 15
 - (c) Wild Plants 10
 - (d) Ferns 5
 - (e) Grasses... .. 6
- (3) INSECTS.
 - (a) Injurious Insects... .. 25
 - (b) Species, representing as many orders and families as possible 50
 - (c) Specimens of injuries done by insects ... 20
- (4) ROCKS AND MINERALS.
 - (a) Kinds of Rock 12
 - (b) Minerals 10
- (5) FUNGUS DISEASES.
 - (a) Saprophytes 10
 - (b) Parasites... .. 10
- (6) ECOLOGICAL.
 - (a) Leaves.
 - (b) Twining Plants.

5. Every student shall keep a Meteorological Record.

In order to develop the power of investigation of the teachers, every member was assigned one of the following problems, to be worked out without assistance, the results to be handed in as a report:

Special Problems.

1. Twining and climbing plants .
2. Twigs of our native trees.
3. Germination of seeds.
4. Shrubs of College Campus.
5. Woods of our Native Trees.
6. Fertilization of plants.
7. Saprophytic plants.
8. Leguminous nodules.
9. Parasitic plants.
10. Greenhouse pests.
11. Leaves.
12. Plant colors.
13. Wheat plant and its products.
14. Flax plant and its products.
15. Cones.
16. Mushrooms
17. Burrows made by animals.
18. Earthworms.
19. A stream.
20. The Toad.

-
- | | |
|--------------------------|-----------------------|
| 21. Cultivated plants. | 26. Fruits. |
| 22. Hibernating insects. | 27. Glandular plants. |
| 23. The Chipmunk. | 28. Guelph Rock. |
| 24. Soils. | 29. Apple scab. |
| 25. The Crow. | 30. Aquatic insects. |

With the results of the year's work in this Department we feel very much gratified. The progress of every student was very rapid, and the enthusiasm never waned. The exhibition of the Collections and Records in the large Nature Study room during the last week of the course was most excellent, and was not only an object of admiration, but also a source of inspiration to the large number of visiting teachers.

Respectfully submitted,

W. LOCHHEAD,

Acting Director of Nature Study Department.

INDEX.

- Abitibi soils, 62.
American Colleges, Observations in Physics, 30.
Analysis of College Report, 7.
Animal Husbandry, Report of Professor, 97.
Animal Husbandry, Report of Lecturer, 89.
Apiculture, Report of Lecturer, 142.
Apple, Diseases of, 43, 48, 49.
Associate Diploma Recipients, 8.
Attendance at College, 4, 7, 150.

Bachelors of the Science of Agriculture, 8.
Bacon, Canadian and Danish, 89.
Bacteriology, Report of Professor, 117.
Barley, 93.
Bean, Bacterial Disease of, 122.
Biology, Report of Lecturer, 38.
Biology, Report of Professor, 35.
Blatchford Sugar and Flaxseed Feed, 85.
Bramble Diseases, 44.
Buttermaking Experiments, 81, 85.

Cabbage, Black Rot of, 122.
Canned Goods for Export, 67.
Cauliflower, Soft Rot of, 123.
Cheese Experiments, 74-81.
Chemistry, Report of Lecturer, 66.
Chemistry, Report of Professor, 50.
Cherries, 109.
Chicken Fattening, 140.
Cold Storage for Butter, 85.
Consolidated Rural School, 4, 154, 166.
Co-Operative Testing of Small Fruits, 104.
Corn, 93.
Cream Experiments, 82, 83.
Creelman, President G. C., Report of, 3.
Cucumber Wilt, 121.
Cumming, M., Report of, 97.
Currants, 9.

Dairy Bacteriology, 123.
Dairy Herd, 86.
Dairy Husbandry, Report of Professor, 73.
Dairy School, 74.
Dairy School Certificates, 10.
Dean, H. H., Report of, 73.
Day, G. E., Report of, 89.

Egg Hatching, 136.
English, Report of Lecturer, 19.
Evans, John, Report of, 156.
Excursions, 6.
Experimentalist, Report of, 129.
Experimental Work, 131.

Export Trade with Great Britain, 67.
Farm Superintendent, Report of, 89.
Feeding Stock, 94.
Financial Statement, 12.
Field Husbandry, Report of Professor, 129.
Fire Blight, 123.
First Class Men, 9.
Flour and Wheat, 54.
Foul Brood, 125.
Fowl, New Breeds Added, 139.
Fruit, Shipping and Storage Tests, 25, 29, 33.
Fungicides, 63.
Fungus Diseases of Fruits, 40.

Gamble, W. P., Report of, 66.
Geese, 139.
Geology, Report of Professor, 35.
Gooseberries, 110.
Graham, W. R., Report of, 135.
Grape, Diseases of, 45.
Groselles, Fungus Diseases of, 45.

Harcourt, R., Report of, 50.
Harrison, F. C., Report of, 117, 143.
Home Economics, 147.
Horticulture, Report of Professor, 102.
Hutt, H. L., Report of, 102.

Insecticides, 63.
Insects, 40.

Jarvis, T. D., Report of, 38.
Librarian, Report of, 143.
Lightning Investigations, 23.
Live Stock Experiments, 96.
Lochhead, W., Report of, 35, 158.

Macdonald Institute, 4, 102, 147, 159.
Mangels, 93.
Manual Training, Report of Director, 152.
Manual Training and Agriculture, 153.
Matron, The, 5.
Molasses Cattle Food, 85.
Moulting, Forcing, 138.
Muldrew, Dr. W. H., the late, 158.

Nature-Study, 36, 154, 158.
Nature Study, Report of Acting Director, 158.
Needs of the College, 6.

Oats, 92.
Orchard Cover Crops, 105.
Orchard Fruits, 109.
Ornamental Shrubs, 113.

- Parchment Paper, dry or moist, 84.
 Pasteuring Milk vs. Pasteurizing Cream, 82.
 Peach, Fungus Diseases, 43.
 Peaches, 109.
 Pears, 109.
 Pepsin vs. Rennet for Cheesemaking, 75.
 Physician, Report of, 145.
 Physics, Report of Professor, 19.
 Plums, 109.
 Potatoes, 93.
 Poultry, Report of Manager, 135.
 Poultry Houses, 137, 138.
 President, Report of, 3.
 Prizes, 10.
 Quinces, 109.
 Raspberries, 109.
 Reed, F. H., Report of, 17.
 Reed, J. H., Report of, 70.
 Rennet vs. Pepsin for Cheesemaking, 75.
 Residence, Report of Dean, 17.
 Reynolds, J. B., Report of, 19.
 Roup, 126.
 Rowsome, H. R., Report of, 142.
 Rural Schools and Macdonald Institute, 4, 164, 166.
 Scholarships, 10.
 School Gardens, 171.
 Short Courses, 5.
 Shrubs, Ornamental, 113.
 Soil Physics, Extension of Work, 34.
 Soils, Analysis of, 23.
 Soils, 60, 62.
 Staff Changes, 3.
 Stewart, Dr. W. O., Report of, 145.
 Stock Judging, Short Courses in, 71.
 Strawberries, 110.
 Students, 7.
 Sugar Beets, 54.
 Swamp Soils, 60.
 Swine Experiments, 97-101.
 Teachers' and Nature-Study, 172.
 Tomatoes, 110.
 Tuberculin Tests with Cattle, 125.
 Tuberculous Cows, Milk from, 125.
 Turnips, 93.
 Vegetable Garden, 110.
 Veterinary Science, Report of Professor, 70.
 Watson, Mary Urie, Report of, 147.
 Wax Models of Fruit, 116.
 Weather Report, 32.
 Weed Seeds, 36.
 Weed Spraying, 39.
 Wheat and Flour, 54.
 Winnipeg, Fruit Shipping to, 25, 108.
 Zavitz, C. A., Report of, 129.

14

2905 A

This book should be returned to the Library on or before the last date stamped below.

A fine of five cents a day is incurred by retaining it beyond the specified time.

Please return promptly.